ISSUE 22 JANUARY 1994 £3.50 OVERSEAS £3.75

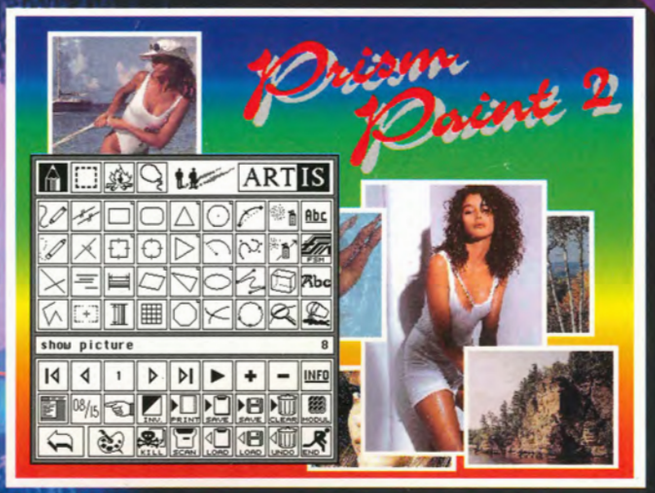
EUROPRESS ENTERPRISE

ATARI ST REVIEW

LEADING EDGE

FULL REVIEWS OF THREE MAJOR NEW PROGRAMS

LYNX SPECIAL – FIVE NEW GAMES!



REPLAY STEREO – SAVE £50!

- Cubase Audio
- Easy Text Vector
- Prism Paint 2



116 PAGES – THE BIGGEST UK ST MAGAZINE

9 770965 778016 01>

INSIDE: Cubase Audio • Easy Text Professional Vector • Prism Paint 2 • Geneva • Mr Smart's Big Time • G Man Pro • Warp 9 • DA's Picture preview • The Pianist • Dogfight • 10 Games Reviewed • And Lots Of Tutorials...



PANASONIC KXP2123 COLOUR PRINTER

24 PIN, 80 COLUMN, 192 CPS/64LQ, 7 FONTS (1 SCALEABLE), EXTREMELY QUIET 43.5 DBA NOISE LEVEL, FREE PRINTER LEAD, 1 YEAR WARRANTY. ONE OF THE QUIETEST DOT MATRIX PRINTERS AROUND.

.....214.99



CANON BJ10 SX BUBBLE JET PRINTER

64 NOZZLE, 80 COLUMN, 110LQ CPS 2LQ/3 DRAFT FONT, 1 YEAR WARRANTY, FREE PRINTER LEAD. A SMALL, PORTABLE PRINTER, VERY QUIET IN OPERATION YET GIVING OUTSTANDING PRINT QUALITY. FASTER AND QUIETER THAN THE BJ10EX. 215.99



CITIZEN SWIFT 90C COLOUR PRINTER

9 PIN, 80 COLUMN, 240CPS/54NLQ, 6NLQ FONTS, 2 YEAR WARRANTY, FREE PRINTER LEAD. A 9 PIN PRINTER WITH COLOUR FACILITY AND FULL PAPER HANDLING FUNCTIONS.

.....164.99



NEW LOWER PRICE

CITIZEN SWIFT 200C PRINTER + COLOUR KIT

24 PIN, 80 COLUMN, 216CPS/72LQ 6 LQ/1 DRAFT FONT, AUTO SET FACILITY, INPUT DATA BUFFER, AUTO PAPER LOADING, ENVELOPE PRINTING, 2 YEAR WARRANTY. FREE PRINTER LEAD.

.....199.99



NEW LOWER PRICE

CITIZEN 240C PRINTER + COLOUR KIT

24 PIN, 80 COLUMN, 240CPS/80LQ, 9LQ/1 DRAFT FONT, 2 YEAR WARRANTY, FREE PRINTER LEAD. ADVANCED VERSION OF 24E WITH AUTOSET FEATURE AND LCD CONTROL PANEL

.....229.99



EPSON LQ100 PRINTER

24 PIN, 80 COLUMN, 250 CPS/72 LQ, 8 FONTS (2 SCALABLE), QUIET 50DB NOISE LEVEL, EASY TO USE CONTROL PANEL, FREE PRINTER LEAD. 1 YEAR WARRANTY. EXCEPTIONAL QUALITY LOW COST 24 PIN PRINTER

.....164.99



EPSON STYLUS 800 INKJET PRINTER.

48 NOZZLE, 80 COLUMN, 150CPS LQ, 360DPI RESOLUTION, 4 SCALABLE FONTS, LOW RUNNING COSTS, EASY TO USE CONTROL PANEL. FREE PRINTER LEAD. 2 YEAR WARRANTY

.....264.99

APPROVED DEALERS FOR

star MICRONICS

CITIZEN COMPUTER PRINTERS Dealer Plus CENTRE

PRINTER ACCESSORIES

CANON AUTO CUT SHEET FEEDER FOR BJ-10EX OR BJ-10SX (50 SHEET CAPACITY) PRINTER. ALLOWS AUTOMATIC FEEDING OF 50 SHEETS OF PAPER INTO CANON BJ10-EX AND BJ10SX. 54.99

CITIZEN PRINTER DRIVER KIT FOR AMIGA. SUITS ALL WORKBENCH VERSIONS FROM 1.3 TO 3.0 ENHANCES PRINT QUALITY FROM CITIZEN SWIFT PRINTERS. GIVES OUTSTANDING RESULTS.....12.99

DUST COVER FOR 80 COLUMN PRINTER (CLEAR PVC) 4.99
PRINTER LEAD (PARALLEL) 1.5 METRES FOR AMIGA, ST OR PC.....7.99
PRINTER LEAD (PARALLEL) 5 METRES FOR AMIGA, ST OR PC 10.99

SWITCHER BOX FOR AMIGA, ST OR PC. CONNECTS TWO PRINTERS OR TWO PERIPHERALS TO PARALLEL PRINTER PORT. MANUAL SWITCHER. REQUIRES SWITCHER LEAD 18.99
SWITCHER LEAD (STRAIGHT THROUGH CABLE). CONNECTS AMIGA, ST OR PC TO SWITCHER BOX. 1.8 METRES PARALLEL (MALE TO MALE 25 WAY D CONNECTORS) 9.99

RIBBONS/CARTRIDGES

INK CARTRIDGE (BLACK) FOR BJ-10EX OR BJ-10SX PRINTER 19.99
INK CARTRIDGE (BLACK) FOR BJ-200 PRINTER 21.99
INK CARTRIDGE FOR STYLUS 800 .....11.99
RIBBON (BLACK) FOR CITIZEN SWIFT 24, 224 OR 240 PRINTER 6.99
RIBBON (BLACK) FOR CITIZEN SWIFT 9, 90C OR 120D+ PRINTER ...5.99
RIBBON (BLACK) FOR EPSON LQ100 .....7.99
RIBBON (BLACK) FOR STAR LC100 OR LC20 .....6.99
RIBBON (BLACK) FOR STAR LC200 PRINTER 8.99
RIBBON (BLACK) FOR STAR LC24-20 PRINTER 5.99
RIBBON (COLOUR) FOR CITIZEN SWIFT 9, 90C, 24, 200, 224 OR 240C PRINTER.....14.99
RIBBON (COLOUR) FOR STAR LC100 .....7.49
RIBBON (COLOUR) FOR STAR LC200 PRINTER.....11.99
RIBBON CARTRIDGE (COLOUR) FOR STAR SJ-144 .....13.99
RIBBON CARTRIDGE (MONO) FOR STAR SJ-144 .....12.99
TONER CARTRIDGE FOR STAR LC 5EX 79.99



BOLLISTICK HAND HELD JOYSTICK (MICROSWITCHED, AUTOFIRE) 10.99



CHEETAH BUG JOYSTICK (MICROSWITCHED, AUTOFIRE) 13.99



COMPETITION PRO EXTRA JOYSTICK (CLEAR BASE, MICROSWITCHED, AUTOFIRE) 11.49



GRAVIS JOYSTICK WITH FOAM PADDED GRIP. ADJUSTABLE HANDLE TENSION AND PROGRAMMABLE FIRE BUTTONS 22.99



KONIX SPEEDKING JOYSTICK (AUTOFIRE) 10.99



SCORPION JUNIOR JOYSTICK 7.99



LOGIC 3 PINTO MINI JOYSTICK (MICROSWITCHED) 10.99

LOGIC 3 QUATRO JOYSTICK (MICROSWITCHED) 10.99



SCORPION PLUS JOYSTICK. ARCADE STYLE WITH TURBO FIRE 9.99



MINI COMPETITION PRO 5000 JOYSTICK (MICROSWITCHED) 13.99



POWER PLAY CRUISER TURBO JOYSTICK (MICROSWITCHED, AUTOFIRE) 11.49



QUICKJOY FOOT PEDAL FOR AMIGA OR ST. TRANSFERS ANY JOYSTICK FUNCTIONS TO FOOT PEDALS. IDEAL FOR FLIGHT AND CAR SIM'S. COMPATIBLE WITH MOST AMIGA AND ST GAMES AND CAN WORK IN CONJUNCTION WITH JOYSTICK OR STEERING WHEEL. 18.99



QUICKJOY JET FIGHTER JOYSTICK (MICROSWITCHED, AUTOFIRE) 11.99



QUICKJOY QJ1 JOYSTICK (MICROSWITCHED) 7.99



SWIFT TP200 JOYPAD FOR AMIGA/ST. TURBO FIRE AND AUTOFIRE 8.99



QUICKJOY TOP STAR JOYSTICK (MICROSWITCHED, AUTOFIRE) 17.49



QUICKSHOT 128F MAVERICK 1 JOYSTICK (AUTOFIRE) 11.99



QUICKSHOT 137F PYTHON JOYSTICK (AUTOFIRE) 9.99



SLIKSTIK JOYSTICK FOR AMIGA OR ST 5.99



SAITEK MEGAGRIP 2 JOYSTICK (AUTOFIRE) 11.49



SPEEDKING ANALOGUE JOYSTICK FOR AMIGA (FOR PROPORTIONAL CONTROL ON SUITABLE SOFTWARE, AUTOFIRE) 11.99



SUPER PRO ZIP STICK JOYSTICK (MICROSWITCHED, AUTOFIRE) 11.99



ALFA MEGAMOUSE 2 FOR AMIGA OR ST. 260 DPI, HIGH QUALITY MOUSE FOR A BUDGET PRICE. 11.99



DATALUX MOUSE FOR AMIGA OR ST (200 DPI, CLEAR DESIGN) 15.99



RSD TRUEMOUSE FOR AMIGA OR ST. 200-400 DPI RESOLUTION. COMFORTABLE FEEL AND LONG CORD 14.49

ANALOGUE JOYSTICK ADAPTOR FOR AMIGA. ALLOWS ANY 15 PIN ANALOGUE PC JOYSTICK TO BE USED ON ALL AMIGAS WITH GAMES THAT FEATURE ANALOGUE CONTROL 7.49

FOUR PLAYER JOYSTICK ADAPTOR FOR AMIGA OR ST 7.99

JOYSTICK EXTENDER CABLE FOR AMIGA OR ST (3 METRES) 6.99



MOUSE MAT (JUNGLE SCENE) WITH SPONGE BACK AND COLOUR PRINT 6.99

MOUSE MAT WITH SPONGE BACKING 4.99

PORT EXTENSION ADAPTOR FOR AMIGA OR ST (PACK OF TWO). EXTENDS JOYSTICK AND MOUSE PORTS BY 21CMS 5.99

ROBOSHIFT INTERFACE FOR AMIGA OR ST (PLUGS MOUSE & JOYSTICK INTO ONE PORT) 12.99

WIN A BRAND NEW



ROVER METRO QUEST

THE TOP PRIZE IN OUR DECEMBER/JANUARY MEMBERS ONLY BIG TARGET PRIZE COMPETITION - PLUS A CHANCE TO WIN LOADS OF OTHER PRIZES - FULL DETAILS OF HOW TO GET YOUR FREE ENTRIES IN NRG, THE SPECIAL RESERVE CLUB MAGAZINE

FOR A FREE 12 PAGE COLOUR CATALOGUE CALL 0279 600204

SPECIAL RESERVE'S CHELMSFORD CLUB SHOP IS NOW OPEN



There's 2,000 square feet of wall to wall computer and console games and accessories! It's huge! It's jam-packed! It's only from Special Reserve. Call in yourself and see! 43 Broomfield Road, Chelmsford, Essex.... just round the corner from the bus station.



MEGADRIVE & MEGA CD DEALS

ALL GENUINE UK VERSIONS

MEGADRIVE 2 + ALADDIN & TWO SEGA JOYPADS 112.99
MEGADRIVE 2 + SONIC 2 & TWO SEGA JOYPADS ...112.99

MEGADRIVE 2 WITH SIX GAMES & TWO SEGA JOYPADS
REVENGE OF SHINOBI, STREETS OF RAGE, SUPER MONACO GRAND PRIX, GOLDEN AXE SUPER THUNDERBLADE, ALIEN STORM. 129.99

MEGADRIVE 1 WITH FOUR GAMES & TWO SEGA JOYPADS
SONIC THE HEDGEHOG, REVENGE OF SHINOBI, STREETS OF RAGE AND GOLDEN AXE 129.99

MEGA CD 2 UNIT FOR MEGADRIVE WITH SEVEN GAMES
SOL FEACE, COBRA COMMAND, SEGA CLASSICS(COLUMNS, SUPER MONACO GRAND PRIX, STREETS OF RAGE, GOLDEN AXE, REVENGE OF SHINOBI). CONNECTS TO MEGADRIVE 1 OR 2TO PLAY ALL MEGA CD TITLES. (DOES NOT INCLUDE MEGADRIVE) 239.99

MEGA CD 1 UNIT FOR MEGADRIVE WITH SEVEN GAMES
SOL FEACE, COBRA COMMAND, SEGA CLASSICS(COLUMNS, SUPER MONACO GRAND PRIX, STREETS OF RAGE, GOLDEN AXE, REVENGE OF SHINOBI). CONNECTS TO MEGADRIVE TO PLAY ALL MEGA CD TITLES. (DOES NOT INCLUDE MEGADRIVE) 239.99

SUPER NINTENDO DEALS

ALL GENUINE UK VERSIONS

SUPER NES ALADDIN PACK WITH ALADDIN & ONE JOYPAD
FREE SN PROPAD 124.99

SUPER NES STARWING PACK WITH STARWING & ONE JOYPAD
FREE SN PROPAD 124.99

SUPER NES MARIO ALL STARS PACK
WITH MARIO ALL STARS FOUR GAME CARTRIDGE & ONE JOYPAD
FREE SN PROPAD 124.99

SUPER NES STREETFIGHTER TURBO PACK
WITH STREETFIGHTER TURBO & ONE JOYPAD
FREE SN PROPAD 139.99



B17
14.99



STREETFIGHTER 2
11.99



PRO TENNIS 2
9.99



RAINBOW COLLTN
8.99



F1 GRAND PRIX
12.99



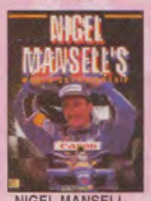
FIRST SAM/MEGA
12.99



SPECIAL FORCES
9.99



BATTLE OF BRITAIN
12.49



NIGEL MANSELL
18.49



SENSI SOCC '92/'93
12.49



SABRE TEAM
10.49



PREMIER MGR
8.49



CHAOS STRIKES BACK
3.99



SPEEDBALL 2
8.99



RAILROAD TYCOON
14.49



ELITE 2
18.99



F16 FALCON + DD
7.49



LOTUS 3
10.49



S OF MONKEY ISL
12.99



SHADOWORLDS
8.99



LEMMINGS
12.49

IMPORTANT PLEASE NOTE

1 MEG = requires at least 1 meg of RAM to run.
D/S = Double sided disks
* = NEW item

A320 AIR-BUS D/S (1 MEG)	19.49
A320 AIRBUS (USA VERSION) D/S (1 MEG)	23.49
ADDAMS FAMILY (1 MEG)	9.99
ADVANTAGE TENNIS	18.49
AIR BUCKS D/S (1 MEG)	19.49
AMBERSTAR D/S	19.49
ANOTHER WORLD	12.49
AWESOME	8.49
B17 FLYING FORTRESS D/S (1 MEG)	14.99
BATMAN RETURNS D/S	18.99
BATTLE OF BRITAIN D/S	12.49
BEACH VOLLEY	7.99
BLUES BROTHERS	7.49
CAESAR D/S (1 MEG)	19.49
CAMPAIGN D/S (1 MEG)	24.49
CANNON FODDER D/S	20.49
CHAMPIONSHIP MANAGER D/S	10.49
CHAMPIONSHIP MANAGER 93 UPDATE DISK (1 MEG)	9.49
CHAMPIONSHIP MANAGER 93/94 D/S (1 MEG)	18.49
CHAOS ENGINE D/S (1 MEG)	18.49
CHAOS STRIKES BACK	3.99
CIVILISATION D/S (1 MEG)	24.49
CORRUPTION (M/SCROLLS)	7.49
CRAZY CARS 3	9.49
CRUISE FOR A CORPSE (1 MEG)	11.99
CRYSTAL KINGDOM DIZZY	13.99
DIZZY PANIC	6.99
DOGFIGHT (1 MEG)	22.99
DREAMLANDS	
TRANSARCTICA, STORM MASTER, SHAR) (1 MEG)	18.99
DUNGEON MASTER & CHAOS STRIKES BACK	20.49
DYNA BLASTERS D/S	20.99
ELITE 2 (FRONTIER) D/S (1 MEG)	16.99
ESCAPE FROM THE PLANET OF THE ROBOT MONSTERS	7.99
EUROPEAN CHAMPIONS (STE)	18.49
F1 (DOMARK) D/S	17.99
F15 STRIKE EAGLE 2 D/S (1 MEG)	6.99
F16 FALCON + DATA DISK'S	7.49
F19 STEALTH FIGHTER D/S (1 MEG)	8.99
FANTASTIC WORLDS (REALMS, PIRATES, MEGA LO MANIA, POPULOUS, WONDERLAND) D/S (1 MEG)	24.49
FANTASY WORLD DIZZY	7.99
FINAL COMMAND	4.49
FIRST DIVISION MANAGER	7.99
FIRST SAMURAI + MEGA LO MANIA D/S (1 MEG)	12.99
FLAMES OF FREEDOM (MIDWINTER 2) D/S (1 MEG)	13.99
FOOTBALLER OF THE YEAR 2	8.49
FORMULA 1 GRAND PRIX D/S (1 MEG)	12.99
FUTURE WARS D/S	10.49
GAUNTLET 2	7.99
GHOULS 'N' GHOSTS	7.99
GOAL (1 MEG)	17.99
GOBLIINS 2 D/S	19.49
GOLF WORLD CLASS LEADERBOARD GRAHAM GOOCH WORLD CLASS CRICKET D/S	8.99 / 19.99
GRAHAM TAYLOR'S SOCCER MANAGER D/S	9.49
HEAD OVER HEELS	7.99
HEIMDALL (1 MEG)	12.49
HEROQUEST	8.99
HEROQUEST 2 - THE LEGACY OF SORASILD/S	17.99
HOLLYWOOD COLLECTION (ROBOCOP, GHOSTBUSTERS 2, INDIANA JONES ACTION, BATMAN THE MOVIE) D/S	9.99
HOOK D/S (1 MEG)	11.49
IMMORTAL D/S (1 MEG)	10.49
INDIANA JONES 2 ACTION (FATE OF ATLANTIS)	17.99
INDIANA JONES ACTION	5.99
INDIANA JONES ADVENTURE D/S	11.49
ISHAR 2 - LEGIONS OF CHAOS D/S (1 MEG)	19.49
JAMES POND	8.49
JIMMY WHITES SNOOKER D/S	15.99
JINXTER (M/SCROLLS)	4.49
KICK OFF 2 D/S	9.49
KILLING GAME SHOW	8.49
KNIGHTS OF THE SKY (1 MEG)	12.99
LEMMINGS	12.49
LEMMINGS DATA DISK - OH NO!	6.99
LEMMINGS 2 D/S (1 MEG)	20.49
LOTUS TURBO CHALLENGE 2	9.49
LOTUS 3 - THE FINAL CHALLENGE D/S (1 MEG)	10.49
LURE OF THE TEMPTRESS D/S (1 MEG)	19.49
M1 TANK PLATOON D/S	11.49
MANIAC MANSION D/S	10.49
McDONALDS LAND	18.49
MICROPROSE 3D GOLF D/S (1 MEG)	13.49
MIG 29 D/S (1 MEG)	10.49
NICKY BOOM 2 D/S (1 MEG)	19.99
NIGEL MANSELL'S WORLD CHAMPIONSHIP D/S	18.49
NITRO	7.49
ONE STEP BEYOND D/S	15.49
OPERATION STEALTH D/S	11.49
PANG	7.99
PANZA KICK BOXING	8.99
PARASOL STARS D/S	8.99
PATRICIAN D/S (1 MEG)	20.49
PICK 'N' PILE	2.99
PIRATES D/S	10.49
PITFIGHTER	7.99
PLAYER MANAGER	9.49
POPULOUS & SIM CITY D/S	17.49
POPULOUS 2 (1 MEG)	20.49
POWER UP (CHASE H.Q, TURRICAN, X-OUT, ALTERED BEAST, RAINBOW ISLANDS) D/S	9.99
POWERDRIFT	3.49
PREMIER MANAGER D/S	8.49
PRINCE OF PERSIA D/S (1 MEG)	7.99
PRO TENNIS TOUR 2 D/S	9.99
QUEST & GLORY (BLOODWYCH, MIDWINTER, CADAVER, IRON LORD) D/S	14.49
RAILROAD TYCOON D/S (1 MEG)	14.49
RAINBOW COLLECTION (BUBBLE BOBBLE, RAINBOW ISLANDS, NEW ZEALAND STORY) D/S	8.99
REACH FOR THE SKIES D/S (1 MEG)	20.49
REALMS	8.49
RICK DANGEROUS D/S	7.99
ROBIN HOOD LEGEND QUEST	7.99
ROBOCOP 2	7.99
ROBOCOP 3 D/S (1 MEG)	9.99
ROCKET RANGER	6.99
RORKE'S DRIFT D/S	8.99
SABRE TEAM D/S (1 MEG)	10.49
SCRABBLE	17.49
SCRABBLE (US GOLD)	20.49
SECRET OF MONKEY ISLAND D/S (1 MEG)	12.99
SENSIBLE SOCCER (92/93 SEASON) D/S	12.49
SHADOW OF THE BEAST 2	10.49
SHADOWGATE	4.49
SHADOWORLDS D/S (1 MEG)	8.99
SHUTTLE D/S (1 MEG)	14.99
SILENT SERVICE 2 D/S (1 MEG)	10.49
SPACE CRUSADE + DATA DISK D/S	14.49
SPECIAL FORCES D/S (1 MEG)	9.99
SPEEDBALL 2 *	8.99
STORM MASTER	10.49
STREETFIGHTER 2 D/S	11.99
STUART PEARCE'S SOCCER SELECTION'S (KICK OFF 2, WORLD CHAMPIONSHIP SOCCER, MANCHESTER UNITED, INTERNATIONAL SOCCER) D/S	13.49
STUNT CAR RACER	7.99
SUPER CARS 2	9.49
SUPREMACY D/S (1 MEG)	13.49
TITUS THE FOX	10.49
TROJAN - CYBER ASSAULT (LIGHT PHAZER GAME)	7.49
TROJAN - FIRESTAR (LIGHT PHAZER GAME)	7.49
TROJAN - THE ENFORCER (LIGHT PHAZER GAME)	7.49
TURBO CUP (WITH CAR)	7.49
TURRICAN	7.99
WHEELS OF FIRE (HARD DRIVIN', POWERDRIFT, CHASE H.Q, TURBO OUTRUN)	13.49
WIZ-KID D/S	18.49
WWF WRESTLING D/S	13.49
ZAK MCKRACKEN D/S	10.49
ZOOL D/S	17.49

ATARI EDUCATIONAL SOFTWARE

FUN SCHOOL 2 (6-8)	8.49
FUN SCHOOL 2 (8+)	8.49
FUN SCHOOL 3 (2-5 YRS)	9.99
FUN SCHOOL 3 (5-7 YRS)	9.99
FUN SCHOOL 3 (7+ YRS)	9.99
FUN SCHOOL 4 (5-7 YRS)	16.49
MICRO ENGLISH (8 YRS TO GCSE. CONFORMS TO NATIONAL CURRICULUM)	17.99
MICRO FRENCH (BEGINNER TO GCSE. CONFORMS TO NATIONAL CURRICULUM)	17.99
MICRO GERMAN (BEGINNER TO GCSE AND BUSINESS LEVEL. CONFORMS TO NATIONAL CURRICULUM)	17.99
MICRO SCIENCE (8 YRS TO GCSE. CONFORMS TO NATIONAL CURRICULUM)	17.99
NODDY'S PLAYTIME (EDUCATIONAL PROGRAM FOR CHILDREN AGED 3+)	17.49

ATARI UTILITY SOFTWARE

HOME ACCOUNTS 2	35.49



TELEVISION / MONITORS

PHILIPS 15" FST COLOUR TV/MONITOR WITH TELETEXT

AND REMOTE CONTROL MODEL 15PT161A. AUTO PROGRAMMING, FRONT AV SOCKETS, REAR SCART INPUT, 2 YEAR WARRANTY, TELESCOPIC AERIAL.

FREE SCART LEAD

(STATE AMIGA, ST, MEGADRIVE OR SNES)

234.99



SONY KVM1400 14" FST COLOUR TV/MONITOR WITH REMOTE CONTROL.

60 CHANNEL TUNING, REAR SCART INPUT, HEADPHONE SOCKET, TWO POSITION TILT, BLACK TRINITRON SCREEN, LOOP AERIAL.

FREE SCART LEAD

(STATE AMIGA, ST, MEGADRIVE OR SNES).

FREE £10 SPECIAL RESERVE GIFT VOUCHER

SONY TV (GREY) + *FREE £10 SPECIAL RESERVE GIFT VOUCHER* 194.99

SONY TV (WHITE) + *FREE £10 SPECIAL RESERVE GIFT VOUCHER* 194.99

SONY TV + FASTEXT + *FREE £10 SPECIAL RESERVE GIFT VOUCHER* 249.99



BLANK DISKS

PACK OF 10 SONY HIGH DENSITY 3.5" DISKS + CASE WITH LABELS AND FREE PLASTIC FLIP TOP DISK BOX	7.99
PACK OF 50 SONY DSDD 3.5" DISKS WITH LABELS	22.99
PACK OF 10 TDK MF-2DD 3.5" DISKS (DSDD BRANDED)	7.99
PACK OF 10 VERBATIM DSDD 3.5" DISKS WITH LABELS (BRANDED)	6.49
3.5" DISK HEAD CLEANER	4.49

Both these televisions will give you a pixel sharp monitor quality picture from an Amiga, Super NES, ST or Megadrive via the Scart socket. To enable you to achieve this we include a FREE Scart Lead with each TV. PLUS when you've had enough of your computer you can watch the TV instead!

We only supply official UK products. Official suppliers of all leading brands. We sell games and peripherals all at amazing prices for Megadrive, Master System, Game Gear, Super NES, Gameboy, NES, Lynx, Amiga, Atari ST, PC, CD ROM and Apple Mac. And we sell T-shirts and cuddly toys!

Special Reserve

The Games Club

Special Reserve members can have all this.. can YOU?

- READ "NRG" Regular Club Magazine
- CHOOSE from our Huge Selection
- BUY at Best Possible Prices
- SAVE with our Special Deals
- SAVE more with our XS Coupons
- WIN up to £60,000 worth of prizes FREE

JOIN now from just £4.00

We only supply members but you can order as you join

There's no obligation to buy and you can be any age. Just send in the form below or phone Sales on 0279 600204.

As a member of Special Reserve you'll receive regular issues of NRG magazine. NRG is our 48 page colour club magazine sent bi-monthly only to Special Reserve members. NRG contains:

1. The best selection of games, peripherals and hardware for all popular formats. We are official Sega, Nintendo and Sony stockists.
2. Reviews in colour and latest information on new products
3. Charts and Release Schedule, to help you choose and plan
4. The best prices. Just one purchase will save you your joining fee
5. Hundreds of Special Offers. Top games at prices you won't believe
6. XS Super Savers. Money-off coupons worth over £180 a year
7. **BIG £10,000 TARGET PRIZE COMPETITIONS**. In every issue of NRG, exclusive to members, free to enter!

That's why over 200,000 people have joined Special Reserve, the biggest games club in the World!

0279 600204

OPEN 10am til 8pm Seven Days a Week!

Order/Confirmation/Receipt sent for every order.

You can also Fax your order to us on: 0279 726842

We pride ourselves on our after-sales service. (18 customer service lines) Inevitably some games listed may not yet be available. Please phone sales on 0279 600204 to check availability before ordering. In the event of delay we issue refunds on request at any time prior to despatch. We reserve the right to change prices without prior notification. E. & O.E.

SAWBRIDGEWORTH SHOP
2 South Block, The Maltings
Sawbridgeworth, Herts

CHELMSFORD SHOP
43 Broomfield Road,
Chelmsford, Essex

CLUB SHOPS OPEN 10am til 8pm SEVEN DAYS A WEEK.

Registered Office: Inter-Mediates Ltd, 2 South Block, The Maltings, Sawbridgeworth, Herts. CM21 9PG. All prices include VAT and carriage to UK mainland. See base of order form for overseas surcharges. We supply hardware only to UK mainland addresses.

MEMBERSHIP FEES	6 MONTHS TRIAL MEMBERSHIP	ONE YEAR ANNUAL MEMBERSHIP	TWO YEARS WITH FREE HARD BINDER
UK MEMBERS	**4.00**	**7.00**	**14.00**
OVERSEAS EC MEMBERS	6.00	9.00	18.00
OVERSEAS WORLD MEMBERS	7.00	11.00	22.00

WE ONLY SUPPLY MEMBERS BUT YOU CAN ORDER AS YOU JOIN. THERE ARE NO SURCHARGES ON TELEPHONED ORDERS (UK)

(PLEASE PRINT IN BLOCK CAPITALS) STOP

Name _____

Address _____

_____

_____ Postcode _____

Phone _____ Machine _____

Enter membership number (if applicable) or NEW MEMBERSHIP FEE (ANNUAL UK 7.00 _____

item _____ _____

item _____ _____

item _____ _____

item _____ _____

ALL PRICES INCLUDE UK POSTAGE & VAT £ _____

Cheque/P.O./Access/Mastercard/Switch/Visa (Switch Issue No_____)

Card expiry date_____ Signature _____

Cheques payable to: SPECIAL RESERVE

P.O. BOX 847, HARLOW, CM21 9PH

Overseas Orders Surcharge (EC or World): Software orders please add £2.00 per item. Non-software items please add 25%. Hardware items supplied to UK mainland only. *Overseas orders must be paid by credit card.*

CONTENTS

ST REVIEW ISSUE 22
JANUARY 1994



Editor:	Vic Lennard
Art editor:	Liz Maddox
Designer:	Terry Thiele
Production editor:	Phil Morse
Games editor:	Tony Kaye
PD Zone:	Nial Grimes

Contributors:
Sharon Aboudara, Manfred Bäcker, Mark Baines, Keith Berry, Maurice Collins, Joe Connor, Kevin Earley, Jon Ellis, Ofir Gal, Nial Grimes, Dave Jones, Iain Laskey, Dave Munsie, Kevin Pawsey, Steve Pedler, Jane Plessey, Mike Robinson, Graeme Rutt, Andrew Wright.

Photography:	Ian Fox
Ad manager:	Simon Lees
Ad production:	Barbara Newall
Marketing manager:	Lucy Oliver
Production:	Sandra Childs
Circulation director:	David Wren

Published by: Europress Enterprise Ltd, Europa House, Adlington Park, Macclesfield SK10 4NP
Tel: 0625 878888 Fax: 0625 850652

Chairman:	Derek Meakin
Managing director:	Ian Bloomfield
Distribution:	COMAG
Telephone:	0895 444055

Subscriptions: MRM Promotional Services, PO Box 500, Leicester LE99 0AA
Tel: 0858 410510 Fax: 0858 434190

Member of the Audit Bureau of Circulation

Atari ST Review is an independent publication. Atari are not responsible for any of the articles in this issue, in whole or in part, or for any of the opinions expressed.

© 1993 Europress Enterprise Ltd. No material may be reproduced in whole or in part without written permission. While every care is taken, the publishers cannot be held legally responsible for any errors in articles, listings or advertisements.

Printed by Passmore International (Maidstone)

COVER FEATURE

PAGE 14

LEADING EDGE



14 EASY TEXT VECTOR
DTP programs are very popular, and the zzSoft packages have always offered good value for money. How good is the first DTP package to support *SpeedoGDOS*? Read Nial Grimes' review on page 14.

18 CUBASE AUDIO
Steinberg's *Cubase* is one of *the* sequencers for the ST/Falcon and the Audio version now offers full integration between a direct-to-disk recorder and the renowned MIDI sequencer. Ofir Gal gives his view on page 18.

24 PRISM PAINT 2
Most of the well known paint programs have come and gone, but Artis continues its support with the follow up to *Prism Paint*. Worthy of consideration? Find out what Keith Berry has to say on page 24.

ST SOURCE

... the source of all information! This is where you'll find our short reviews, the best tutorials, your opinions in our Letters pages and answers to your questions...

86 SHORT CUTS
Your guide to four more ST products including an excellent alternative to the mouse or trackball...

88 BEAT THE SYSTEM
Confused by some of the more basic elements of your ST? Andrew Wright is at hand with a guide to creating your own boot-up disk...

90 DTP TUTORIAL
We don't just give you a usable version of *Timeworks 2*, we also continue to show you how to use it courtesy of Nial Grimes.

93 TOP NOTCH
With all the different Auto folder programs available, life can get a little confusing. Leave it to Ofir Gal to put you in the picture.

97 EASYBASE
A final tutorial from Joe Connor that looks at the dedicated editor...

100 STRONG WORDS
In the last part of this series, Andrew Wright considers how to load and save documents.

102 BASIC PROGRAMMING
Ofir Gal takes up where he left off last issue by improves his printing utility.

105 C PROGRAMMING
Our Prospero C tutorial finds Jon Ellis creating a program to delete all .BAK files...

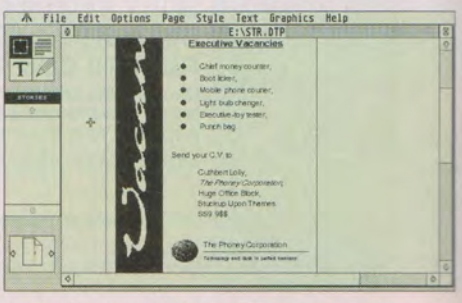
108 COMMS COACHING
Graeme Rutt explains how to handle your modem's data flow control.

109 ATARI BULLETIN BOARDS
The third part in the *ST Review* series on Atari-specific BBSs from Mark Baines.

110 ASK THE EXPERTS
Five experts provide answers to your questions!

112 LETTERS
Do you want to share an opinion with the Atari world? Just drop *ST Review* a line and see your name appear on our letters pages...

114 BACK ISSUES
Missed any of our issues? Here's where you order them from, but don't delay – they're running out fast!



Artistic advertising – find out how in our DTP tutorial on page 90.

FEATURES

6 READ ALL ABOUT IT!
All the latest news and information...

10 COVER DISK PROGRAMS
Get into sound with the *Replay Stereo* software!

28 PLAYING THE SYSTEM
Ofir Gal takes a close look at *Geneva*, the multi-tasking sensation.

33 CAN YOU MANAGE...
... your fonts, that is! Steve Pedler marks his *ST Review* debut with a review of the *GDOS Font Manager*.

34 WARP POWER
Warp 9 has been improved a fair deal, but is it enough to compete with *NVDI*? Mike Robinson provides the answers.

37 GET THE PICTURE
Sneak preview from Maurice Collins of Digital Arts' latest baby, *DA's Picture*.

38 SUPER SUPRA!
Fancy a budget fax/modem from Supra? Nial Grimes does...

42 IN THE BIG TIME
Sharon Aboudara looks at a stunning new educational package...

45 NEXT MONTH
Find out what we've got in store for you!

46 THROUGH THE KEYHOLE
Vic Lennard speaks to Roger Pearson, the man behind zzSoft...

50 ONE MAN AND HIS ST
... or should that be TT as a DTP bureau goes under the microscope.

52 SUBSCRIPTIONS
Subscribe now and get one of our excellent free gifts.

54 MIDI MONTHLY
An exclusive preview of *MUSiCOM 2*, an Akai SO1 editor and *The Pianist* make MIDI Monthly essential reading!

58 READERS' OFFERS
Cheaper 0.5Mb STE memory heads the cast of *ST Review's* offers – just for you, the reader...

66 GRAHAM GOOCH CRICKET OFFER
Another *ST Review* exclusive: the follow-up to *Graham Gooch World Class Cricket* and only from this magazine!

72 BOOK OFFERS
Reviews by Iain Laskey, the *ST Review* book list and manuals from most of our old cover disk offers...

74 PD ZONE
Nial Grimes looks at the latest printing programs, RPGs, utilities and Falcon-specific software in the public domain.



Easy Text Vector – page 14.



Cubase Audio – page 18.



Prism Paint 2 – page 24.

INFORMAL

Two new columnists join the team...

EDITORIAL:	*Technology...*	**6**
AMERICAN PIE:	*All the USA news*	**32**
TOP MARK:	*Guten Tag!*	**32**
TECH TALK:	*Benchmarking*	**36**
WRIGHT ISSUES:	*A painful lesson*	**40**
IN PUBLIC:	*In praise of PD...*	**44**

EXCLUSIVE!
GRAHAM GOOCH SECOND INNINGS OFFER – SEE PAGE 66

SCREEN SCENE

Ten new games and a two page Lynx Special!

DOGFIGHT	**62**
LYNX SPECIAL	**64**
HOOK	**67**
SHADOWLANDS	**67**
PARASOL STARS	**67**
H-MEC 2	**70**
TRIADS	**70**
JIGGSY	**70**
OSCAR BURMAN GAMES	**71**
TRACKBALL	**71**
OPERATION BLUE SUNRISE	**71**



Bandits at ten o'clock! Full review of Dogfight on page 62.

Atari Lynx Special – five new games reviewed on page 64.



ON THIS MONTH'S COVERDISK

REPLAY STEREO

The perfect way to get into sound on the ST! *Replay Stereo* software allows you to load the various sounds we provide on the cover disk, hear them, see their waveforms on screen, edit in a variety of ways and even add special effects. And there's a special offer to buy the recording hardware for just £39.95!

Our tutorial starts on page 10...



Plus

An exclusive cut-down version of ***Mr. Smart's Big Time***, the latest educational program for the ST. Six of the 25 modules are active – absolutely perfect for all those younger minds! See page 43.

CATERING FOR EVERYONE



I'm an unashamed Atari enthusiast. When I first bought an STFM, back in 1987, a 1040 fitted the bill because I needed a megabyte of memory for my main music program. As 1040s had a double-sided disk drive, I've never had to contend with a single-sided variant but have the distinct feeling that such a drive would have driven me to despair. Why? Because you can guarantee that most of the programs I fancied only came on double-sided disks. Software authors took the double-sided drive to be the norm, and most serious programs are sold on such disks. Over the past six years, more and more programs have required a megabyte of memory – and over 5,000 of you have upgraded the RAM in your 520s to 1Mb via our Offers pages.

My first hard drive, a 60Mb Supra affair, cost me nearly £1,000 and an upgrade to 2.5Mb left me with little change out of £400! How times have changed. You can now purchase a 105Mb hard drive for less than £300 and the only reason that memory chips aren't cheaper than they actually are is because of a temporary world-wide shortage. Even then, a 2.5Mb upgrade for an STFM is only £59!

The point I'm getting at is that times really have changed, and the norm for an ST is no longer a double-sided floppy drive and a megabyte of memory. Many of the latest programs have a voracious appetite for memory; for instance, Atari Works needs 2Mb due to the SpeedoGDOS support. In fact, any program using the new vector font system will be severely limited in a 1Mb machine and probably too cumbersome to use without a hard drive. And as for multi-tasking with the likes of MultiTOS, Geneva and Mag!X...

ST Review attempts to keep up with the latest moves in technology. I'm sure you'll agree that our feature on "Beyond Hard Drives" a few issues ago made interesting reading, and this issue brings you three products that each break new ground in their own way – especially Cubase Audio for the Falcon.

However, we also appreciate that there are an awful lot of you who still have a 520ST with a colour TV and we certainly have no intention of leaving you behind. That's why we run series like Beat The System and Top Notch – to help you gently climb the ladder to getting the most from your machine, no matter what memory and disk drive configuration you have. You'll also notice that our three main reviews have practical examples; there's little point in reading a good review without being able to realise what difference that program will make to you.

On a final note, the Europress Enterprise-sponsored shows have been a great success and are now spreading to the North East and Scotland. Don't miss them!

Vic Lennard
Editor

MINCE

The Midlands and North of England played host to two Atari-specific shows on the first two Sundays in December.

The first of these provincial exhibitions, sponsored by Europress Enterprise, was staged at the National Motorcycle Museum, next to the National Exhibition Centre in Birmingham on the 5th; the second was at Haydock Park racecourse a week later. Both shows were well attended and gave Atari enthusiasts a chance to see new products and talk to the dealers and other Atari owners.

Neal O'nions from Compo Software said: "These shows have proved that there is life in the Atari market outside of London. Plans are well under way for similar shows in Newcastle and Glasgow early next year."

Everything was available for your Atari from a blank disk to a new Falcon. Interesting new products included *ScreenEye*, a real time video image processor that works in full colour on the Falcon, *Geneva* and *Musicom 2* from Compo Software and *Clarity 16*, *Colour Master* and *Harlekin 3* from HiSoft. System Solutions re-introduced Keyclicks with a new price of £19.95 and showed *Mag!X*, a new multitasking system for the whole range of Atari computers, for the first time in the UK at the Manchester show.

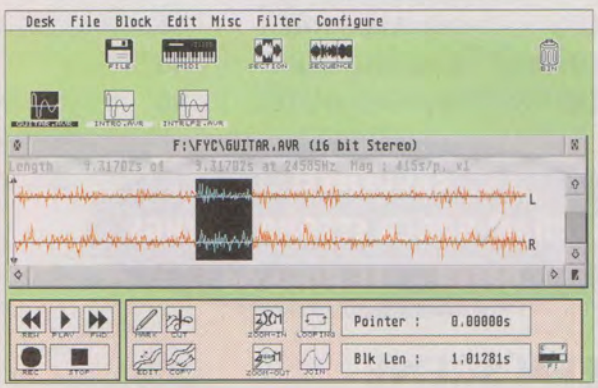
Many other new products were on show including a totally new operating system called *SMS2*, *Chroma 24*, *STraight Fax 2* and many others.

Karl Brandt, Managing Director of System Solutions said: "I enjoy these shows because they are all Atari users. There's no computer snobbery and they appreciate the equipment."

> ***"The quality of people at the show was extremely high. There is great loyalty towards the Atari brand name."***
>
> *Nick Harlow, Proprietor, 16/32 Systems.*

Other exhibitors included 16/32 Systems, Warpzone PDL, CGS, Gasteiner, Falcon Fact File, Titan Designs and Calamus User.

More shows are planned for the New Year and, provisionally, the Newcastle show will take place on Saturday 28th February with the



Clarity 16 – the audio editing package from HiSoft was on show.



Hands venturing into pockets was a common sign...

PIES AND MEGAS

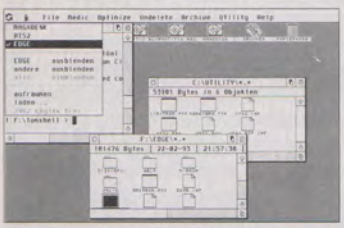
Atari-specific shows go from strength to strength...





Chromastudio – unique animation and morphing package for the Falcon.

Glasgow show on the following day, Sunday 29th. Warpzone are promising a totally new range of software from Germany, never before seen in the UK, while the Medusa (see separate news piece), an Atari clone with a 68040 processor and 64MHz clock should be shown for the first time in the UK at Newcastle by System Solutions.



Mag!X – first UK showing by System Solutions.



SMS2 – a new operating system for the ST?



Festive decorations gave the Manchester Show the right feel...

JAGUAR ON CBS

The Atari Jaguar made its debut on US television a few weeks ago on none other than the CBS news programme, *CBS This Morning*.

The feature started off with a look at the newly-launched (in the US) Panasonic Real 3DO Multiplayer, which has been developed by a consortium of American and Japanese companies including Electronic Arts and Panasonic's parent company, Matsushita. It's a 32-bit CD-based machine with "similar" specifications to the Jaguar and a $700 price tag.

The 3DO was presented as being *the* games console of the future, or at least that was the case until the presenter said, "Right now 3DO stands alone, but not for long". The Atari logo was then splashed across the screen and the 64-bit Jaguar was introduced as "an even more powerful system". A prominent computer journalist had been "let loose" on the Jaguar before the programme and said, "I would actually go out and buy a Jaguar".

When told that the 3DO was in the stores now at $700, presenter Harry Smith asked, "Who's going to pay that?" Early reports from the States suggest that the Jaguar has been well received in New York and San Francisco with stores selling out as soon as stocks arrive.



Fantasy flight – each Jaguar includes Cybermorph...

THE MEDUSA TOUCH

An immensely powerful Atari clone is about to be released. Going under the name of Medusa, it boasts a Motorola 68040 processor with a 64MHz clock speed, offering about fifteen times the power of a standard TT.

Impressive specifications include 32-bit data and address busses, up to 128Mb of on-board RAM and a slightly modified version of TOS 3.06. Being modular in design, various add-on boards can be incorporated including a VME Bus multiple bus board, numerous graphics cards and hard drives.

Prices are yet to be announced but are expected to be around £2,500 for the basic motherboard, tower housing and ST input/output board.

NEWS

STRAIGHT TALKING

Version two of *STraight Fax* is finally out – and it has UK distribution in the form of System Solutions. The program can now run as a desk accessory, for background receiving of faxes, and supports both Class one and two fax modems. Price is £89.95 or £25 if upgraded from version one with the return of the full original package.



Full Fax – STraight Fax now runs as a desk accessory.

LYNX SALES ON THE UP AND UP

Telegames, who released five Lynx titles last year including the highly acclaimed *Desert Strike*, are confident of the machine's renewed success this year. Two new games, *Off Road* and *Crazy Ace Miniature Golf* are already under development for release later in the year. Telegames' Peter Mortimer said recently, "With the renewed interest in Lynx over the past few months, and the new Telegames and Atari titles recently released, Lynx sales this (1993) Christmas are going to be the biggest ever". See feature on page 64.



Follow the crowd with Lemmings on the Lynx!

POOR SHOWING AT FES

Despite all the hype and media attention, the Future Entertainment Show failed to attract the numbers expected by the organisers. The prediction of the previous year's attendance rising from 55,561 to 70,000 simply didn't materialise; only 35,828 visitors turned up at the four day event. Despite this, exhibitors were said to have been reasonably pleased, with several already having booked up for the next event.

The organisers claimed to have been happy with the press coverage and blamed various contributory factors. The next Future Entertainment Show is to be extended to five days and will run from 26th to 30th October 1994. The location has been changed to Earls Court 2, the venue of the 1992 event. The dates are strategically positioned to overlap the schools' half term holiday, something that should boost attendance figures.

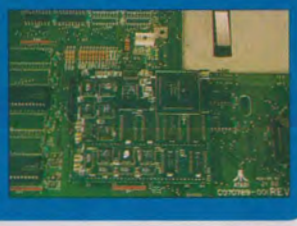
TIMEWORKS COVER DISK

It appears that some of you who own older STs with early TOS versions are having problems installing the cover disk version of *Timeworks 2* from the last issue. This is down to a problem with the INSTALL.APP.

If towards the end of the installation you get a warning that your Fonts disk is full while trying to write the EPSONFX.EPS file, send a stamped-addressed envelope to PC Wise, Dowlais Top Business Park, Dowlais, Merthyr Tydfil, Mid Glamorgan CF48 2YY who will then send you a pair of pre-installed, ready to run disks. Please include a note of whether you are working in mono or colour.

PRICE CORRECTION

In the System Solutions' T Board review last issue, only a single price was given for the two boards! The correct prices are: T28 – £199.95, T36 – £299.95.



Top speed – the T28 gives near-Falcon performance.

ST REVIEW HOTLINE

Just a reminder that ST Review is now running the same helpline service as that offered by the other Europress Enterprise magazines. Between 2pm and 5pm each Friday afternoon, you can call us on 0625 859766 with any technical or cover disk enquiries. Such advice will not be available outside of these times.

IN BRIEF

- **A new Atari user group has been set up in Norway. Called Atari Users of Norway, the group is run by Steine Arne Jensen and intend to produce a newsletter every two months along with offering a file copying (as well as disk copying) service on their 2,000 disk collection, to members at low prices. Free telephone support is available from 09.00 to 14.30 daily. Atari Users of Norway support all ST, STE, TT and Falcon owners. For more details, contact Atari Users of Norway, c/o Steine Arne Jensen, 3630 Rdberg, Norway. Tel: +47 32 74 14 73; Fax: +47 32 74 17 00.**

- **The Falcon Owners Group has recently changed address and opened up new branches in Denmark and Sweden. The UK branch continues to be headed by Richard Davey but has moved to P.O. Box 353, Stafford, ST17 9US. Both the new groups offer the same benefits to members as the UK branch.**

- **The recent Christmas International Computer Show at Wembley failed to attract the anticipated turnout, with some exhibitors claiming that the attendance on one of the days may have been as low as 400. Official attendance figures had yet to be released as we went to print.**

- **Lander Software are up in arms at an attempt by Lawrence J Parker, a US firm, to copyright the word "edutainer". The move follows an unsuccessful bid by UK educational software producers, Ablac, to copyright "edutainment". Lander's boss, Roy Lander, is trying to mobilise the industry into opposing the move. He claims that if "edutainer" gets registered, then "edutainment" will probably follow. The result would be that firms could be forced to pay a licence fee in order to describe their educational software as "edutainment"!**

- **The CD-ROM add-on for the Falcon030, which was expected to be ready in Autumn 1993, has failed to materialise. When asked if a low cost Falcon CD-ROM could be developed from the Jaguar version, Atari Corporation's Bob Brodie said recently, "The interface for the Jaguar CD ROM is different from the Falcon's, so I don't see it as a common project". He added, "The Falcon030 can use industry standard CD-ROMs right now via the SCSI port". Does this mean that Atari have shelved plans for a Falcon-badged CD-ROM player?**

- **Kodak and Apple are both said to be on the verge of releasing "filmless" cameras in The States. These devices (code named Venus and Mars) capture images in digital format and have the capability of downloading them into a computer. The more affordable of the two is expected to retail at around $600, with its more expensive kinsman at $2,000. Both companies are keeping details under wraps at the moment. We expect both cameras to be unveiled in Las Vegas by the time we go to print.**

System Solutions

World Record

68000 CPU running at 36MHz

Two new Accelerators are now available for the MegaST and ST(FM) computers. Performance and price are sensational. The T28 with a 28MHz clock is 3.5 times faster and the T36 with a 36MHz clock is 4.5 times faster than the original ST's clock. The use of the original 68000 processor guarantees near perfect compatibilty. CPU cacheing is switchable for added compatibility with the cartridge port devices. DTP, Graphics Software and Cubase show a fantastic speed increase. Compared with a standard ST with NVDI and without Blitter, Gembench gives the following results:

	ST(FM)	T28	T36
CPU	100%	299%	373%
Graphics	100%	949%	1097%
Average	100%	763%	890%

The combination of the T28/T36 and NVDI transforms the humble ST into a powerful graphics workstation - a dream come true for all those who want more speed at an affordable price.

T28 Accelerator, 28MHz, 64kb Cache **£189**
T36 Accelerator, 36MHz, 64kb Cache **£279**
NVDI bought with either **£39.95**

High Density

elCo doubles Disk space to 1.44Mb!

★ Automatic floppy disk detection
★ Compatible with your floppy disks
★ Software is included. (ACC and CPX)

Kit price still only £79.95 inc VAT

High Res Monitors

The SM14s is a perfect replacement for the Atari SM124/5 monochrome monitors, exceeding the original specifications. The 14" high resolution paperwhite FST gives a perfectly centred, crisp and sharp image without blurring at the edges.

"Essential Buy, 90%"
ST Review, May 93

without audio
SM14 £129.95
with audio
SM14s £149.95



NEW PRICES

FLY LIKE THE WIND...

NVDI replaces the Atari display routines. Screen updates with NVDI are 3-10 times faster. Works with all TOS versions on all Atari ST, MegaST, TT and for the Falcon. MultiTOS and SpeedoGDOScompatible.

"Scrolling through a long text file in 1st Word Plus took half the time ... Calamus, Calligrapher and Wordflair also showed a marked improvement ... Compatibility is remarkable and we have yet to find a program that is not compatible with NVDI. ... a must for all ST and Falcon owners"

ST Review Issue 16, August 1993.

NVDI Version 2.5 - £49.95

MiniS

The small award winning SCSI Hard Disk System at an affordable price, for all computers with SCSI connections.

Awarded 92%, "Essential buy"
Atari ST Review Christmas '93



★ Quiet fan ★ Dual SCSI port
★ Device Number Switch
★ Internal Power Supply
★ Small (2.5x6x8.5in) (WxHxD)
★ Smart and tough plastic case
★ 2 Year Warranty on all drives

	TT/Falcon	ST(FM/e)
85MB	£249	£289
127MB	£279	£319
170MB	£309	£349
240MB	£359	£399
340MB	£459	£499
1000MB	£999	£1049

Please add £20 to ST(FM/e) if the ICD Link is required. Heavy Duty professional cases with 60W Power Supply, add £50. All Prices include VAT

To order and for further information telephone or write to:

System Solutions
Windsor Business Centre, Vansittart Road, Windsor, SL4 1SE Fax: 0753-830344

Mail Order Telephone
0753-832212

or come to our London Showroom at:

The Desktop Centre
17-19 Blackwater Street, London, SE22 8RS
Tel: 081-693 3355 Fax: 081-693 6936

For small items under £50 please add £2.95 P&P
Large items over £50, courier charge £10
Dealer enquiries are welcome

KeyClicks

THEIR BACK!!

At long last we have this invaluable keyboard accessory back in stock. The Atari keyboard has never been famous for its good feel, but now you can cure this with Keyclicks. These are small rubber "mushrooms" that fit between the keytop and the actuator underneath. They will transform the feel of the keys.

Keyclicks ... Easy DIY installation... for ST(FM/e), and FALCON 030 computers.

Price: £19.95 for a complete set.

The Falcon Column

Are you planning to purchase a Falcon? How much of your old kit will work on it? Or do you just feel tempted and want to know how much a complete system would cost? For advice and a personal quote phone:
London: 081-693 3355 or
Windsor: 0753 832212

Now in Stock

Falcon030 Starter Pack:
4mb, 14" Mono Monitor & BlowUP **£889**

BlowUP 030 the Display Expander
Using Software and/or Hardware the display expands up to 400%. Virtual screens up to 8000% are also possible.
BlowUP 030 - Software **£15.00**
up to 880x608 53/101Hz
BlowUP 030 - Hard 1 **£49.95**
Exellent for Multiscan's (1024x768)
BlowUP 030 - Hard 2 **£69.95**
VGA and other fixed frequency monitors.

falconWING SIMM memory board
Accepts 4x 1mb or 4mb SIMM,
falconWING - 0mb **£49.95**
falconWING - 14mb **£699**
Price includes trade-in on 4mb memory board.

Falcon Tower **£179.95**
Integrates the system, space for extra hard drives, separate or replacement keyboard. Phone for the Tower Fact Sheet and price list. DIY or ask for a quote on ready-to-run fitted systems.

We are now dealers for **Steinberg**

Cubase Audio for the Falcon 030 is now up and running in the Showroom.

Repairs & Upgrades

All repairs are carried out by qualified personnel. If you would like a quote, please ask for an estimate. Need it back in a hurry? Then ask for our professional next-day service. Call us to discuss your upgrade requirements. We fit all quality upgrade products available. We can collect and deliver.

Call the professionals now for your personal quote.

Windsor Service Centre:
Windsor Business Centre, off Duke Street, Windsor, SL4 1SE. **Tel:0753-818816**

London Service Centre:
The Desktop Centre, 17-19 Blackwater Street, East Dulwich, SE22 8RS. **Tel:081-693 1919**

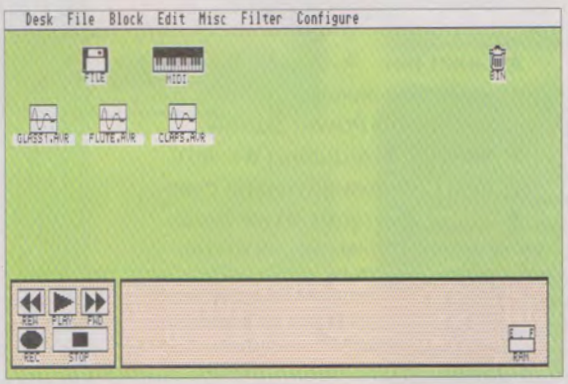
ATARI WORKSHOP

ST Review presents you with the perfect way to get into sound on your ST – the Replay Stereo software! Mike Robinson gets you started...

INSTANT REPLAY!

Stereo Replay is a powerful sound editing package for the ST range of computers. Since the ST doesn't have any recording hardware, an optional cartridge is available to let you record your own samples.

The editor program on the cover disk is capable of playing and editing sounds in the form of sample files. It will let you loop, cut, copy and paste, and even merge different sounds along with adding special effects like echo and flange. If you have a MIDI keyboard, sounds can be triggered directly from it.



The editor desktop is much like the usual one. Click on the disk icon to load samples or drag a sample icon onto it to save that sample.

GETTING STARTED

Run the program by double-clicking on *EDITOR.PRG*; no installation is required. The only setting depends on whether you have an ST or an STE. When the program starts it displays the AVR copyright message in a dialogue box. Click "OK", go to the Configure menu and select System Config. Don't worry about the various settings – simply set the output to "Monitor" or "STE" if you have an STE, MegaSTE, TT or Falcon. If one of the latter is connected to a hi-fi system, select "Hi-Fi". Click on Save and you're ready to start loading samples.

SAMPLE SETS

Replay Stereo allows you to save sets of samples; a sample set is included on the cover disk. To load it, click on the Load Set item under the Misc. menu and select the file *TEST.SET* which you will find in the SOUNDS folder. This will load three sounds: a flute, hand clap and the sound of breaking glass. There are plenty more sounds on the disk, but for now these three should be enough to learn how to use the program.

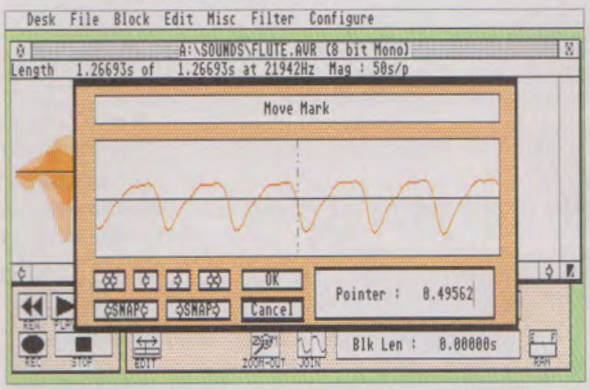
PLAYBACK

Once loaded, sounds are shown as icons on the editor desktop. This operates much like the normal desktop – it even has a trash can. Double click on the CLAPS.AVR sample icon and you will see a standard GEM window open with the sound waveform displayed. In the bottom right corner are the tape control buttons which work just like you'd expect. Click on Play to hear the hand clap. The other buttons are for fast forward, rewind, stop and record, although the latter is not possible without the optional *Replay Stereo* hardware. To stop playback, press the right mouse button.

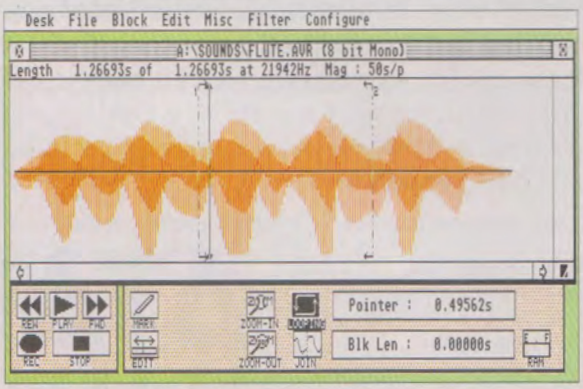
Just as a quick demonstration of the tricks the editor is capable of, select Reverse from the Edit menu. An alert will appear asking for confirmation. Click "OK" and wait until the editor has finished processing. You'll notice that the display has changed and if you click on the Play button now, you'll hear the sound playing backwards. Reversing the sound again will undo this effect although other editing facilities are not as easy to undo!

EDITING A SAMPLE

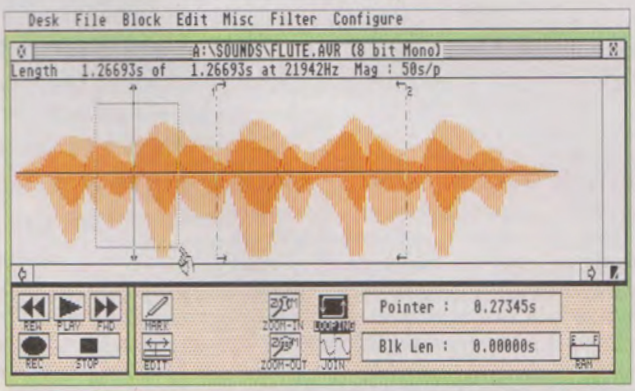
Snippets of sounds are usually called "samples"; the clap sample is very short so let's have a look at a longer one. Close the window in the normal manner and double-click on the FLUTE.AVR icon. The flute sample is much longer and can be manipulated more. Notice that the Loop icon is selected. Looping is a useful technique that allows you to create continuous playback from very short samples by repeating a selected



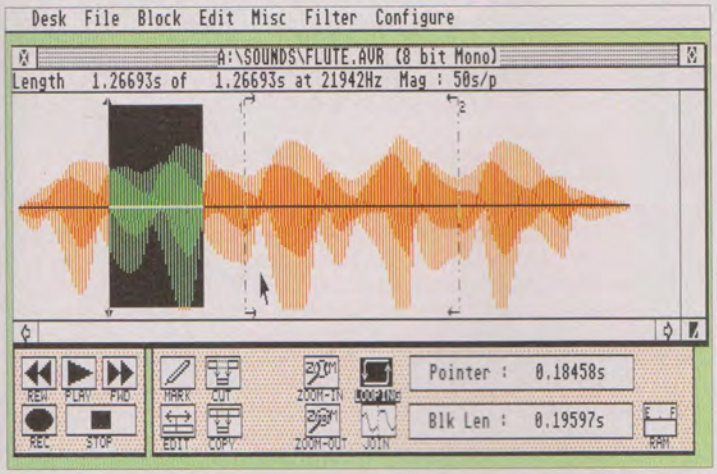
When cutting and pasting parts of the sample it is important to find "zero-crossing" points. Luckily, the editor finds these for you by simply clicking on "Snap".



The waveform display can be used to play the sample from any point. Simply click once over the sample to reposition the pointer and press Play.



To select a block for editing, hold the mouse button down and rubber-band the required portion.



A selected block is shown in inverted colours on-screen. When a block is selected, all operations affect the block rather than the whole sample.

section. If you play the sample, it will sound continuously until you press the right mouse button. Switch looping mode off for the moment by clicking on the Loop icon and setting Looping Off in the dialogue box that appears.

At this point you may want to hear selected parts of the sample. Move the mouse over the waveform and click somewhere in the middle of the sample. This causes the playback marker to jump to that position. Clicking Play now plays the sample from that point until the end of the flute sample. It is also possible to select a block, just as you would in a word processor or a graphics program.

The simplest way to select a block

WHAT IS A SAMPLE?

Technically, sound is the result of changes in air pressure which our ears are able to detect. The ear drum moves with the changes in pressure and this is translated by our brain into sound. A microphone works in a similar way, replacing the ear drum with a diaphragm that translates the air pressure changes into a varying electrical current. During the sampling process, the strength of the current is measured by the computer at frequent time intervals and the values stored in a file.

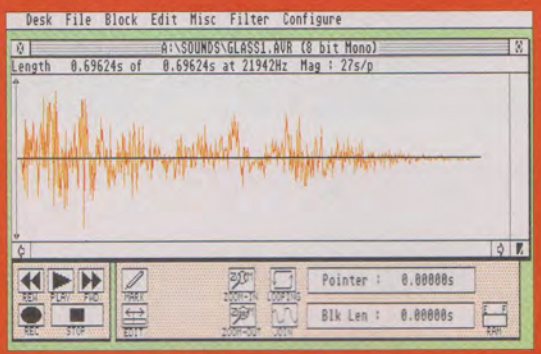
The frequency at which these measurements are taken is known as the sampling frequency or sampling rate and affects the quality of the sample. The more often you measure the air pressure, the more information is collected about the sound and the better the sample sounds. However, this is also reflected in the file size. A sampling frequency of about 44,000 times a second, or 44kHz, is about the maximum needed to cover the human hearing range. An audio CD uses a 44.1kHz sampling rate to play back over 600Mb of sample data!

STRBAKUP

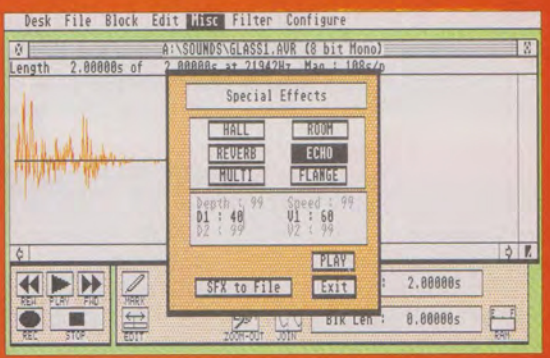
DISK BACKUP • EXCLUSIVE UTILITY BY OFIR GAL • MEDIUM/ HIGH RES

Back up your cover disk and keep the original in a safe place. Run the program and follow the on-screen instructions. There is no need to format your backup disk as the program will do this for you. STRBAKUP.PRG is for backing up your cover disk. We do not recommend it for any other use.

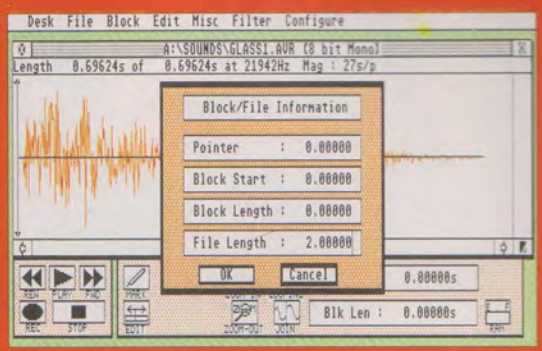
SOUND EFFECTS



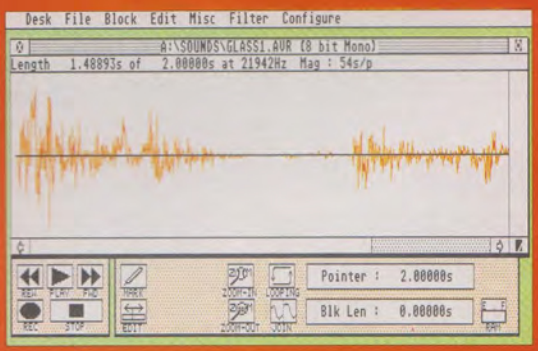
1 ***Open the GLASS.AVR sample display by double clicking on its icon. The waveform display is typical of a short sharp sound. On the left is the beginning of the sound. The height of the waveform shows how loud it is.***



3 ***Now select the S.F.X. menu item from the Misc menu. In the Special Effects box select Echo and enter the values 40 and 60 into the text fields. Now click on "SFX to File" and wait while the program creates the delay effect.***

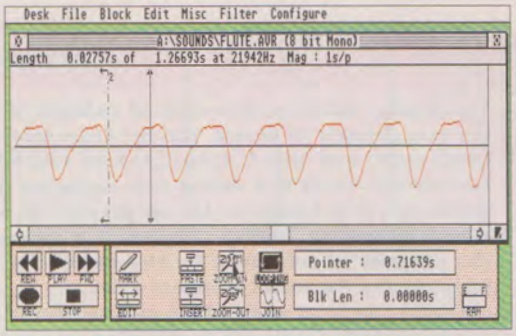


2 ***Click on the Blk Len (Block Length) field at the bottom of the screen. This brings up the Block/File Information box. Change the file length to two seconds and select "OK".***



4 ***The sample can be played directly from the Special Effects box by clicking Play or from the main window where you should be able to "see" the echo on-screen.***

Replay Stereo Tutorial



It is possible to zoom in and out using the Zoom buttons. Here the flute sample is shown at maximum magnification.

is to press the mouse down over the waveform, and drag the mouse to the right while the mouse button is held down. This "rubber-bands" the waveform. Release the mouse button and the sample area should invert in colour. Pressing Play now will only play the selected portion. To deselect the block, select Block Hide from the Edit menu or simply press the <H> key while holding <Alt> down. The currently selected block can now be edited.

CUT, COPY AND PASTE

It is easy to cut a block and then paste it to another position in the sample. Before you go ahead and cut, it is useful to edit the block markers. The editor includes some functions that enable you to find optimal points for cutting and pasting. Without these, cutting and pasting can cause clicks at the cut point – commonly called "glitches". To get help, click on the Edit icon at the bottom of the screen and select Block Left from the dialogue box. The display will change to show a small portion of the sample with the block start in the centre. The two snap buttons on the left let you move the block start to a favourable point in the sample. One button moves the point forward, the other backwards. Just click Snap once and you will see the display adjust accordingly. Press "OK" and repeat the procedure for Block Right.

Now that the block is finally selected, cut it using the Cut icon. The block will be removed and the remainder of the sample moved backwards to fill the gap. The block has been moved into the clipboard and an icon called Paste appears on the editor desktop. You can view and play the contents of the clipboard by double clicking on this icon.

Make sure the original flute sample window is active again. Click the pointer anywhere in the sample area and press the edit icon. This time you need to snap the pointer position as before. When this is out of the way you can finally paste the clipboard contents back into the sample. The section is always pasted to the pointer position. There are two ways of doing this. Paste simply copies the clipboard over the current sample, obliterating any previous sound for its duration. Insert mode works by pushing the rest of the sample forward so making it longer. Depending on your original block and how well the editor optimises the joins, the result may be so smooth that you can't hear the join.

You can do far more with the editor and we will cover more of its facilities next time. Until then, have fun!

SAMPLE LOOPING

Sample looping is a well known technique in the music industry. By definition, a sample must have a definite length while a musical note can be as long as a musician wishes it to be. For instance, a violinist can play a continuous note without needing to breath. While it is possible to record a very long sample, there is another solution.

A section of the sample is repeated for as long as required to create the illusion of continuous sound. The start portion is played as normal, preserving the attack characteristic of the sound. This is followed by the looped portion and ends with the original sound tail to add a little more realism. In other cases, a "break beat" is sampled and then looped to make a rhythm track for a whole song.

Looping is an art form. It is not easy to create loops that sound smooth and the zero-point technique used by the editor is just one of many that are employed in the search for the perfect loop.

IF YOU HAVE PROBLEMS WITH YOUR COVER DISKS... DON'T PANIC!

In the unlikely event that your cover disk won't load or gives you any other problems at all, remove any peripherals and try again. To restart your computer, SWITCH IT OFF for at least 20 seconds to clear all traces of resident programs before continuing. If this doesn't solve your problem, return your disk, with a stamped addressed envelope to; **P.C. Wise Ltd., Dowlais Top Business Park, Dowlais, Merthyr Tydfil, Mid Glamorgan, CF48 2YY.**

PC Wise will test the disk and send a replacement as soon as possible. You can contact the PC Wise Helpline with any urgent problems concerning faulty disks. PC Wise can be contacted by telephone on 0685 350505 between 10.30 and 12.30 on weekdays.

GET THE FULL PACKAGE AND SAVE £50!

While the Replay Stereo software on our cover will give you a great start in the world of sound on your ST, there is one thing that it won't allow you to do and that's record your own sounds! For that you need the special module that plugs into the cartridge port on an ST.

The usual price of the full Replay Stereo package is £89.95 but through a special deal with HiSoft/AVR, we can offer this to you for just £39.95 – that's a saving of a massive £50! With this, you can record your own sounds in mono or stereo! Also included are three manuals and the full software incorporating loads more sounds, programming information and a superb percussion sequencer called *Drumbeat*!

REPLAY STEREO OFFER

- ☐ REPLAY STEREO COMPLETE.....£39.95
- ☐ DELIVERY.....£2.00
- ☐ NEXT DAY DELIVERY.....£5.00

CREDIT CARD ORDER LINE – 0525 713671
OR FAX YOUR ORDER – 0525 713716

IMPORTANT!

Paying by CHEQUE or POSTAL ORDER – please make payable to MICRODEAL and write your cheque and guarantee number on the back. All prices are inclusive of VAT. Please allow 28 days for delivery from when we receive your order. For non-receipt of goods call 0525 713671, Monday to Friday between 9am and 5pm.

TO: *ST REVIEW* REPLAY STEREO OFFER. PLEASE RUSH ME REPLAY STEREO BY THE METHOD OF POSTAGE SELECTED ON THE LEFT.

I ENCLOSE TOTAL PAYMENT OF ☐ £41.95 OR ☐ £44.95

PAYABLE BY: ☐ CHEQUE ☐ P.O. ☐ CREDIT CARD

NAME: .....

ADDRESS: .....

.....

POSTCODE: ..... TEL (DAY): .....

VISA/ACCESS/MASTERCARD/DELTA/SWITCH NUMBER:

EXPIRY DATE: /

SIGNATURE: _____ SWITCH ISSUE NO. /

Send your order to: ST REVIEW REPLAY STEREO OFFER, MICRODEAL, THE OLD SCHOOL, GREENFIELD, BEDFORD MK45 5DE

Power Programs Without The Price



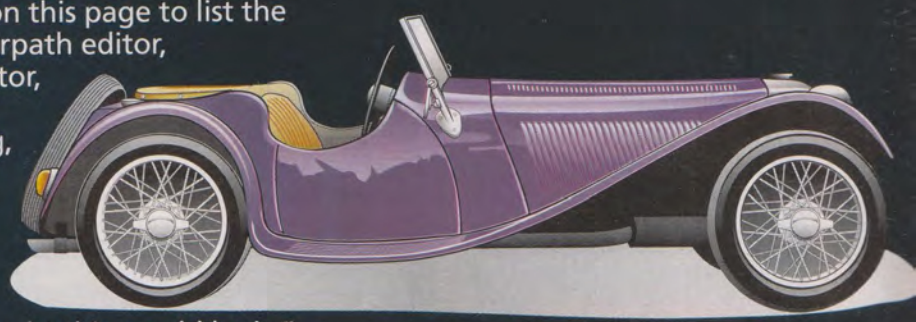
Inshape

Inshapes begins with the modeller, which has a variety of tools such as spin, extrude, and a template editor. Many built in primitive like cube, sphere, disc, cylinder, and tube are also included. Models can be assembled from component objects using up to 16 layers. Manipulation tools means an object can be moved, rotated, scaled to an accuracy of 0.0001mm. A wide range of materials are provided including metals, stones, plastic, wood, glass and sand. Many textures are available from marble to multi coloured spots. Even features such as bump mapping, image mapping, and waves are possible. Models can be illuminated, positioned and animated in the scene editor which in turn is your 3D world.

"A feature-packed modelling package that deserves to take the market by storm." David Nilson. ST Review December 1993.

DA's Vector

The essential graphics, animation and presentation tool.
DA's vector is a colour vector graphics program for any Atari ST(E)/TT and Falcon computer, with at least 2MB of memory.
Unfortunately, we don't have sufficient space on this page to list the 100's of features included, like the tracer, vectorpath editor, 3d extruder, vector morphing, keyframe animator, graph and chart generator, picture converter, colourfade generator, freehand bezier drawing, to name but some of the features that combine to make this program not so much a tool as a fully equipped graphics workshop.



"If we were to pick just one winner, without doubt this would be it."
Atari ST User 1993 Awards.



Chagall Limited

Chagall is a pixel based image processing software package that not only uses the well known standard tools from most image retouching packages, but also has new creative tools which allow you to create stunning pictures which do not look as if they have been computer generated.
Some of the main features are: MultiTos compatible, 8Bit masking, rotate to 1/100 degree, full drag and drop between pictures, clear and intuitive interface.

Please note that InShape requires a maths co-processor and works with an Atari TT or Falcon, priced at £149.00. DA's Vector is £149.00 and DA's Vector Pro is scheduled to be approx £249.00. Chagall Limited is £149.00. The Tabby Graphics Tablet is £49.95 and DigiTape Lite is on special offer at £99.00 with a copy of this advertisement, until Feb '94. CGS ComputerBild may be contacted on 081 679 7307 for orders and further information, or write to us at: 231 Northborough Road, Norbury, London SW16 4TU.

TAKIN' IT EASY...

DESKTOP PUBLISHING

Easy Text Vector is the first desktop publisher to exploit Speedo's remarkable potential to the full. Nial Grimes discovers whether it was worth the wait...

Without doubt, *SpeedoGDOS* is one of the best things that has ever happened to the ST. It allows suitably written GEM applications to call upon a host of different fonts and print them at virtually any size.

While most GDOS packages have been able to make limited use of *SpeedoGDOS*, *Easy Text Professional Vector* – to use its full name – is the first to put its host of new features into practice.

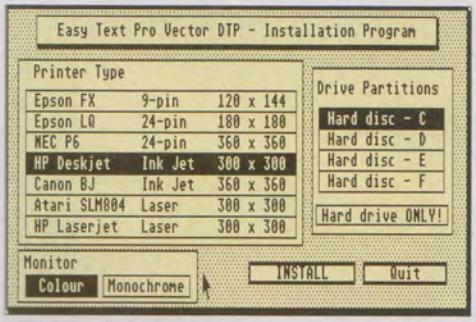
FAST FORWARD

Stirring the program into action is a job best left to the installer, which takes the necessary file and dumps them onto your hard disk. Unlike previous versions, *Vector* really does need 2Mb of memory and a hard disk to work effectively. If you've got 2.5Mb or more it's possible to run from a RAMdisk, which works reasonably well. *SpeedoGDOS* itself is not supplied, so if you don't own a copy now is a good time to give HiSoft a ring.

The interface shares a very similar feel to *Timeworks*, with just a little sprinkling of *Calamus* for good measure. It's strictly frame based and most of the day-to-day operations are carried out through an icon panel that sits to the left of the screen. The cursor shapes take a bit of a break from the Atari norm, but otherwise it's very relaxing to work with and quite intuitive.

Text and graphics can be imported in most popular formats, although you'd be well advised to splash out five pounds on the *Colour Extension* which saves converting everything to mono. Once part of your document, graphics can be cropped or optimised to avoid unsightly moiré patterns on the printed page. There's also a rather nice vector objects palette which includes lots of handy primitive shapes such as stars, boxes and triangles.

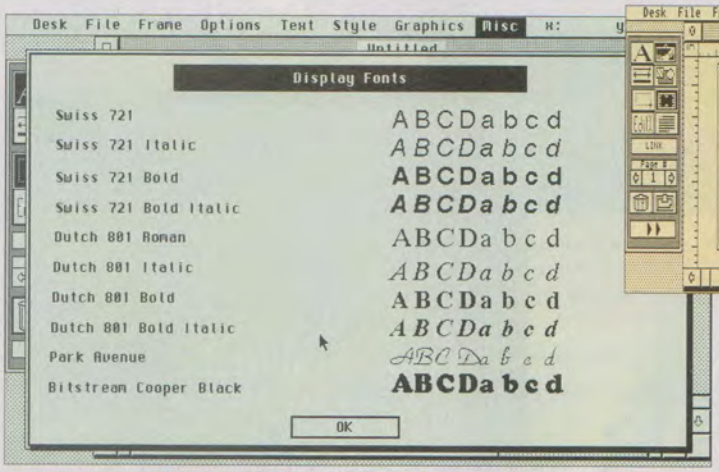
The text handling facilities aren't quite up to *Timeworks*' standard, but they come pretty close. There are fourteen paragraph tags available and limited text runaround has been implemented in the latest version. As long as your *SpeedoGDOS* caches are sufficiently large, the screen updates remain very lively. *Vector* is not directly file compatible with older versions, but a utility is supplied to transform your .PRO files into the required .PRV format. It works on a single document or a whole directory full, so it's not going to take very long to bring your entire collection up to date.



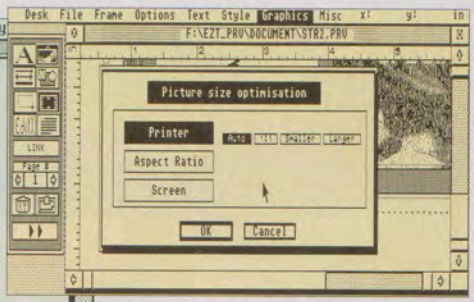
The installation process is very painless, but you will need a hard disk and at least two megabytes of memory.

IN WITH THE NEW

The most attractive improvement *Easy Text Vector* has to offer is its print quality – the Speedo fonts are absolutely breathtaking on paper. You are no longer limited in terms of size either; all of the predefined point



A very nice addition is the Display Fonts button which shows all of the available typefaces on screen – sure beats the "stab in the dark" approach!



Imported graphics can be optimised to suit the screen or printer, thus avoiding unsightly moiré patterns.

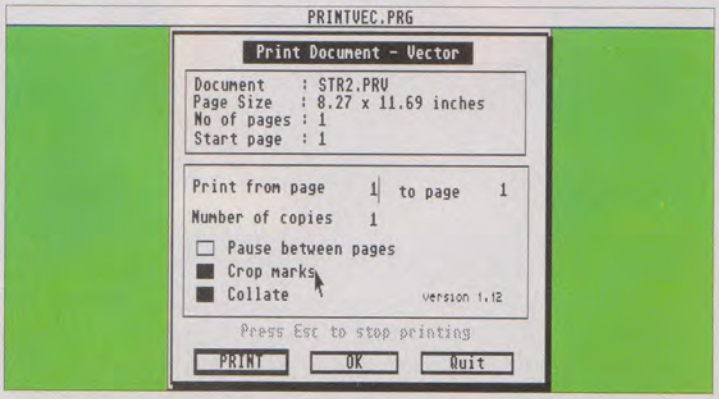
Printing is handled by an external program, which can be run separately if memory gets tight.

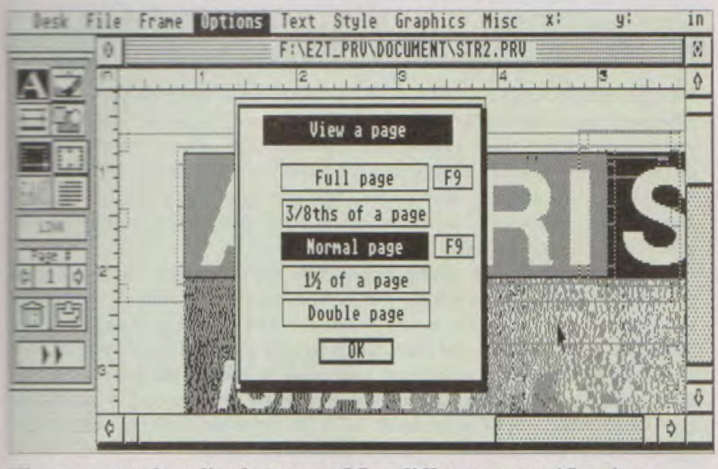
INSIDE INFO

***Easy Text Vector* will usually only run in one screen resolution unless you install the package twice. Fortunately there is a quick and easy solution to the problem.**

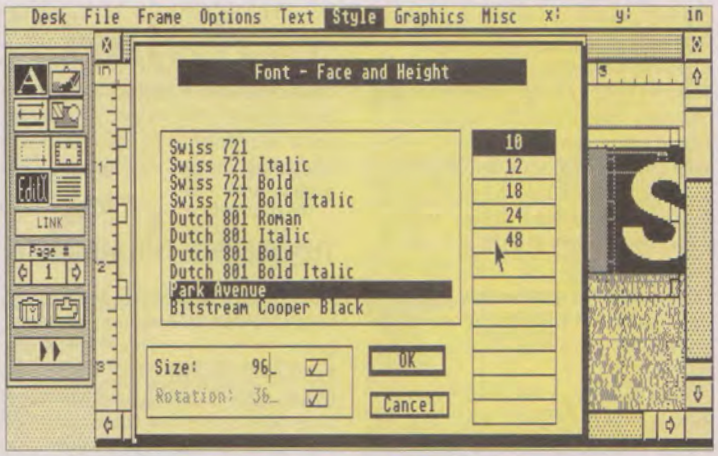
Having installed the package, open a desktop window for the master disk. Make your way to the *EZT_PRV.SYS* folder where you will find four resource files. If you've installed for monochrome, copy *EZT_VECC.RSC* and *PRNTVECC.RSC* to the *EZT_PRV.SYS* folder on your hard disk. If you picked "Colour" in the install program, copy *EZT_VEC.RSC* and *PRINTVEC.RSC* to the same location.

***Easy Text Vector* will now run in either screen resolution. You will be warned if files were not created in the current resolution, but just click "Proceed" and everything should be hunky-dory.**





The page can be edited at one of five different magnifications – Speedo's font scaling keeps the screen display pretty at every level.



Easy Text Vector supports font sizes from 3 to an incredible 999 points!

sizes are listed in the fonts dialogue as usual, but a new box towards the bottom allows any figure between 3 and 999 points to be entered. At the latter level, one letter is too big to fit on an A4 page!

The *SpeedoGDOS* support also brings with it some fringe benefits. Width files have been committed to that big trash-can in the sky and the screen display is much improved too. Ten fonts is still the maximum allowable per document for the time being, but it's much less of a problem now that the selection can be chopped and changed without resorting to the widths program every time. The tricky part is remembering which fonts have been used in which document!

It's even possible to use styles on Speedo fonts, although the caches do tend to gulp memory and Atari don't really recommend it. Mind you, the "styles" option can look quite attractive when compared to having all four varieties of Swiss and Times in memory! To round off the type handling improvements there's a dialogue box that displays all of the currently available fonts.

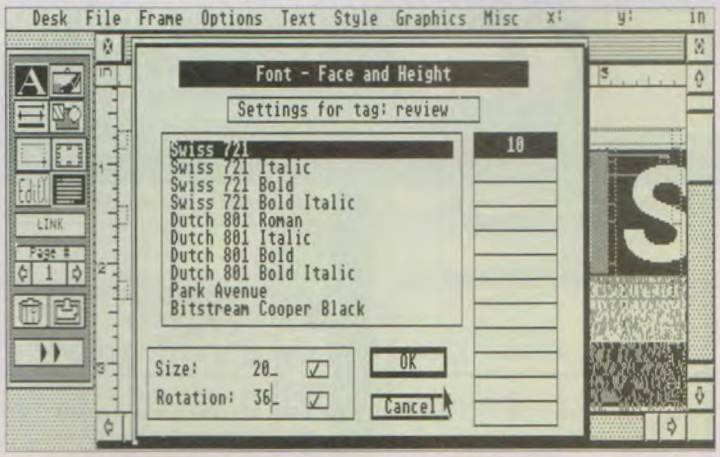
One area where *Easy Text* always lost out to its arch-rival *Timeworks* was in the view size department and *Vector* goes a long way towards correcting this problem also. Five magnification levels are now available at your fingertips, and the two most popular – normal and full page – can be toggled with the <F9> key. Unlike the original, a page can be edited at any view size.

Along with outline fonts comes the opportunity for effects, and *Vector*'s contribution is rotated text. This function is closely tied in with paragraph styles and in the fonts dialogue box you will find a new "rotation" button. Just define the number of degrees and away you go. The text is clipped to its frame on screen which can make alignment a bit tricky, but a few extra carriage returns can do wonders and it doesn't affect the printout at all. Funnily enough, there's a "positive" bug in the redraw routines which displays rotated text beyond the limits of the frame if you drag it far enough downwards – just pray that zzSoft haven't fixed it yet! Admittedly, the rotation system is a little bit clumsy but let's face it; most documents don't contain vast amounts of twisted text.

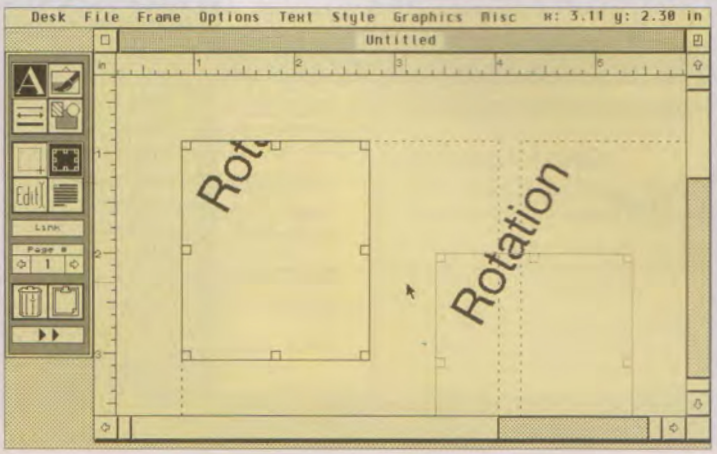
Falcon owners will be pleased to learn that the new version is fully compatible with their machine, in ST Medium and High resolutions.

PRACTICALLY PERFECT!

Most *Easy Text Vector* customers are likely to be migrating from *Timeworks* and from their point of view, the interface will take a little bit of getting used to. Not that there's anything wrong with it you understand – it's just different. Like *Calamus* each frame has a specific "type" and any attempt to put text in a graphics frame will result in a dialogue box explaining what's gone wrong. Coping with the page elements falls more into the *Timeworks* line of thinking; each can be promoted to the foreground, pushed to the background and dragged just as usual. The only difference lies in the addition of an extra mouse pointer which is used to drag and size – the



Text can be rotated to any angle through the use of a new button which is to be found at the bottom of the fonts dialogue box.



Rotated text is usually clipped on screen, but drag the frame downwards and what do you know – the restriction disappears!

- ✔ Flexible view sizes
- ✔ Stunning print quality
- ✔ Text rotation

PROS AND CONS

- ✘ No support for Falcon resolutions
- ✘ Ten font limitation

"A fully functional DTP package with Speedo support for £39.95 – incredible!"

NAME: EASY TEXT PROFESSIONAL VECTOR
COMPANY: ZZSOFT
CONTACT: 0254 386192
PRICE: £39.95 (£10 UPGRADE FROM EZT PRO)
MIN MEMORY: 2MB (2.5MB WITHOUT HARD DISK)

EASE OF USE	✪✪✪✪✪
DOCUMENTATION	✪✪✪✪✪
EFFECTIVENESS	✪✪✪✪✪
VALUE FOR MONEY	✪✪✪✪✪

OVERALL 82%

default pointer is limited to creating frames.

Some of the more inspired features take a lot less time to accept. The way lines orient themselves to a frame's direction is superb as is the way the tag dialogue automatically pops up when a paragraph is selected. And from a basic design point of view, there's very little that can't be produced with *Easy Text*. You will probably find a good vector art package handy and *GEMView* is extremely useful for converting pictures to mono.

The package shares another concept with *Calamus* too – that of vector objects. These are a set of predefined shapes that can be used to create boxes, triangles, stars and many other shapes without resorting to an art package. The fill style and borders can be adjusted before the shape is positioned on screen or at any time thereafter, by simply using the "Fill style" and "Line style" dialogue boxes. The weakest spot is the text runaround, which really denies the vector objects a degree of their power. There are no hassles with rectangles or squares, but irregular shapes can pose a real problem.

THANKS FOR THE MEMORY

The big desktop publishing bugbear, that of memory, shouldn't prove to be a problem. Once you push past *SpeedoGDOS*' own overheads, *Easy Text Vector* is quite frugal and you can do a lot on a 2Mb machine. If the document only contains small fonts, the caches can be trimmed right back and a little memory pushed a lot further.

When it comes to printing out your designs, everything runs like clockwork. With a nice, fast hard disk, *SpeedoGDOS* has worked out all of the fonts in no time and the actual printing process is very quick indeed. The only printing problem you might face is caused by the number of installed fonts. Like its predecessor, *Easy Text Vector* refuses to print if more than ten fonts are installed on the system, so if you receive an unusual error message try making some adjustments with the *Outline* program.

VERDICT

So there you have it; *Easy Text Professional* just got better. It lives up to its name in terms of usability and at just ten pounds for an upgrade, you'd be foolish to pass it by. The feeling you get is that *SpeedoGDOS* could be pushed further, but after all the package is not aimed at the heavyweight market.

There is some room for improvement but when you get to the bottom line *Vector* is a much better package for exactly the same price – and one that can rival *Calamus* or *PageStream* in terms of print quality.

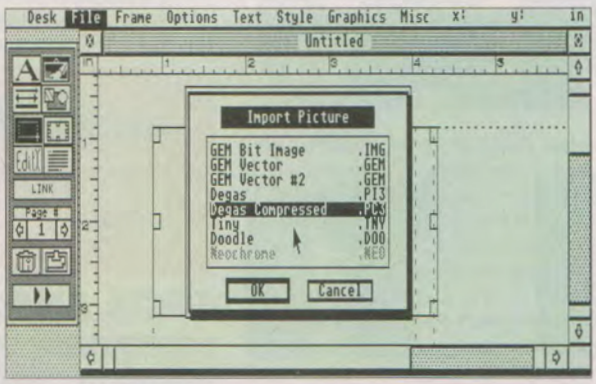
In general, the new features blend very well into the old package and *Easy Text Vector* makes an ideal entry into the world of desktop publishing. At last – a reason to buy Speedo!

TANGO & CACHE

Unlike older versions of GDOS, Speedo uses a caching system which means that only necessary fonts are stored in memory. If an unavailable size is requested, Speedo will "flush" some of its cache memory and create the requested font while you wait. Therefore the bigger the cache, the quicker packages like *Easy Text Vector* will work, because more sizes can be stored without resorting to disk access.

The cache sizes are easily adjustable through the *Outline Fonts* program. If you're working with Speedo fonts alone, the only settings you have to worry about are the Character and Miscellaneous caches – in fact, Bitmap can be safely set to zero. Of these two, Character will have the biggest effect on performance because it's here that the predrawn sizes are stored. Enlarging the Character cache can lead to a noticeable improvement in speed when working with lots of different fonts.

In order to use styles on Speedo fonts, such as bold, italic and outlined, zzSoft suggest that the Character and Miscellaneous caches be set to at least 1024Kb, although it seems to work happily with much less. Do bear in mind that the machine needs to be rebooted to adopt new cache sizes...

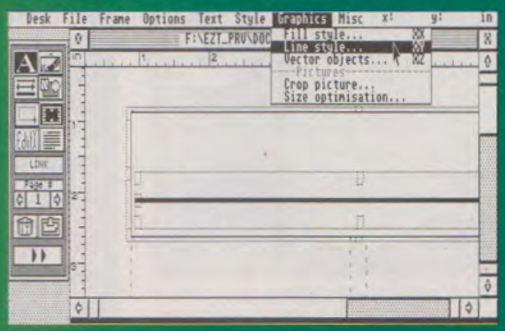


Most mono image formats can be loaded into Easy Text Vector, and GEMView is ideal for preparing colour pictures.

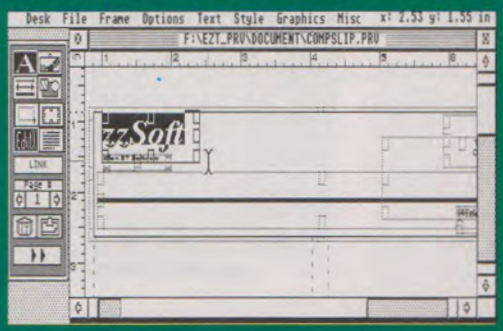
STEP BY STEP

WITH COMPLIMENTS

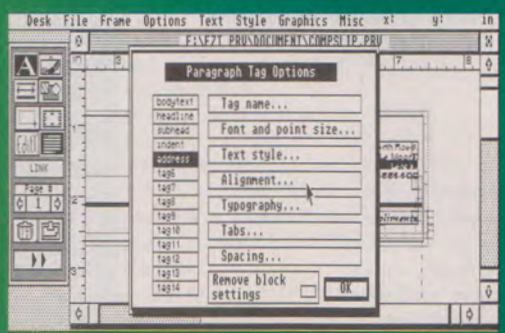
Let's put all of this principle into practice and design a compliments slip for zzSoft...



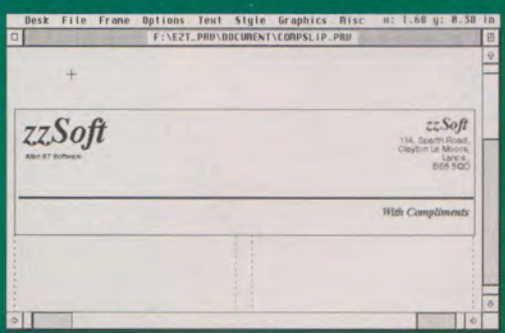
1 ***First lay in the basis for the design – one box and a horizontal line. Experiment with "Line style" and "Fill style" to find the correct shading and border settings.***



3 ***The logo is dropped into place now. There's little point in defining a whole new tag for one word, so use the Fonts dialogue to adjust the size to 48 point Times Bold Italic.***



2 ***The address is going to be flushed right, so define a new Swiss 10-point paragraph tag and choose "right" from the Alignment dialogue. Apply the tag to each line in turn.***



4 ***Finally the logo is copied and reduced to sit above the address. Try switching the frames off to get a better view of the finished design.***

FaST Club

For users of Atari ST & Falcon computers

2 Broadway - Nottingham - NG1 1PS
Tel: 0602-410241 - Fax: 0602-241515

Software

❒ Address 1.6	£12.95	❒ Imagecopy 1 (Mono)	£ 9.95
❒ Astronomy Lab	£24.95	❒ Imagecopy Colour	£14.95
❒ C-Font2	£ 9.95	❒ Key Master	£ 6.95
❒ CalAssistant	£19.95	❒ Molgraph 2	£24.95
❒ CalAssistant SL	£29.95	❒ Mouse Master	£ 9.95
❒ Clip Art Catalogues (2)	£ 4.00	❒ Mouse Tricks 2.15	£ 9.95
❒ TW Clip Art Catalogue	£ 2.95	❒ Multiprint	£ 9.95
❒ TW Clip Art Set 1	£ 8.50	❒ PageAssistant	£29.95
❒ TW Clip Art Set 2	£ 8.50	❒ Redacteur 3.15	£99.00
❒ TW Clip Art Set 3	£ 8.50	❒ Redacteur Lite	£69.00
❒ Easy Text Plus DTP	£19.75	❒ Redacteur Junior	£39.00
❒ Easy Text Pro DTP	£39.95	❒ Trimfont	£ 9.95
❒ EdHack	£14.95	❒ Ultimate Virus Killer	£ 9.95
❒ Fontkit Plus 4	£24.95	❒ Universal Item Selector III	£14.95
❒ Fonty: Calamus Font Editor	£11.95	❒ Warp 9	£24.95
❒ FontGDOS and Drivers	£ 2.95	❒ X-Debug	£24.95

Second Time Around

❒ 20 x 3.5" DSDD disks £5.95

Following re-organisation of our PD catalogue we have lots of disks that have been used, re-formatted and re-labelled. A bargain!

Newsletter setter

❒ Fontpac+ Newsletter Set £14.95

Complete set of fonts suitable for use with Timeworks Publisher or any other program that uses GEM bit-mapped fonts. Ideal for newsletters, magazines, reports, and booklets. Requires high-res monitor and 300-dpi printer.

Fonts to go

❒ Textstyle - launch price £14.95

Another cracking program from Jeremy Hughes, author of Imagecopy. Enter your text into Textstyle, select a Calamus or GEM font, add text effects and justification, and the resulting picture file can be imported into a whole range of packages. Great for generating headlines for wordprocessors like First Word Plus, Redacteur or Write ON; or use it with an art package such as PixArt to make posters, banners, greetings cards, etc. Thousands of applications. RRP - £19.95

❒ Textstyle bundle £9.95

Order Textstyle at the same time as Imagecopy2 or PixArt and save another £5.

PD and Shareware

❒ ST Club Catalogue Free

Probably the most comprehensive catalogue for the ST. Details on hundreds of PD and Shareware disks plus specifications of all of the products listed in this advert.
Disks cost £1.25ea; or just £1 for subscribers!

❒ Falcon Club Catalogue Free

Details of our Falcon specific software.

What a picture

❒ Imagecopy 2 £19.95

There is no better way to grab, view, convert and print images on your ST or Falcon. Supports 9-pin and 24-pin Epson compatibles, Cannon BJ, HP Desk/Laserjet mono and colour printers.

Only the best

❒ View II £14.95

"The most useful utility ever written" ST Format.

Fast and furious

❒ Warp9 v3.8 £29.95

At last, the Falcon enhanced version of our highly acclaimed screen accelerator package, Warp 9.

New stocks!

❒ Your Second Manual £8.95

Hidden away in an office in Denmark we have unearthed what must be the last stocks of this classic ST book. If you feel as if your computer knows more about computing than you do, then you need this book! A brilliant introductory text for beginners or anyone new to Atari computers. This is the authorised printed version of Y2M: beware of imitations!

Great fonts

❒ Calamus Font Set £8.50

10 DS disks of PD and Shareware fonts in a box.

❒ PageStream Font Set £8.50

10 DS disks of PD and Shareware fonts - includes four disks of PostScript fonts.

❒ STC Fonts Catalogue £2.95

Catalogue and printouts of the fonts in our professional quality range of Calamus fonts.

Omikron

We are the UK distributor for this famous German software publisher. Our release schedule for the English versions of their ST and Falcon software:

❒ PixArt £34.95

Feature packed true colour pixel painting program. PixArt is very quick, supports digitizers and graphic tablets, supports all ST-TT and Falcon screen resolutions (monochrome to 16.7 Million colours) and runs on all fully GEM-compatible graphics cards.

Other highlights: you can zoom in or out of the picture and still use all the drawing tools. PixArt has very creative block manipulation facilities that will be of great use to DTP users. PixArt is fully Falcon compatible. *Wonderful, wonderful!* is how the German Atari magazine TOS summed up its feelings about PixArt! Available: Now.

❒ Freeway £tba

A new generation database that combines free-form text database structures with traditional field structures. Accessible internal SQL-structure and fully Falcon compatible. Available: December

❒ Mortimer £14.95

Memory resident multi-function utility that can be called up from within any GEM or TOS application. Features include: text editor, printer spooler, keyboard macros, virus guard, flexible RAM disk, screen grabber, disk utilities such as file copying and disk formatting, and a pop-up pocket calculator. Available: Now

❒ Mortimer DeLuxe £34.95

Even more features: ten text editors, file search, disk copier, better file selector, time scheduler with alarm, and more... Fully compatible with ST, TT and Falcon computers. Available: December.

ST Applications

For the last three years we have been publishing a monthly magazine for ST users. Full of informative and authorative articles ST Applications is an essential read for all Atari users who are serious about getting the best out of their machine.

Don't take our word for it, here are some unsolicited comments from happy readers:
unfailingly interesting, superbly written NWF
really excellent value GFS
invaluable service for ST users PS
consistently impressed AS
no hesitation in renewing my subscription PPK
you can read it again and again RF
Originals of these letters available for inspection at our offices.

Falcon Applications
Includes our mag-in-a-mag supplement on all things Falcon

Subscriptions

❒ 12-issues: £24.00
❒ 3-issue trial: £5.00
❒ Sample issue: £2.50

Overseas subscriptions welcome, in fact 25% of our readership live outside the UK. Air Mail subscription rates: Europe - £27; RoW - £37.
Risk Free. Susbcriptions to ST Applications are risk free. Write asking us to cancel your subscription and the full unused balance of your subscription will be refunded by return of post. We have been publishing software, books and magazines for the Atari market for over 8 years.

Dust Covers

These dust covers are manufactured from top quality water resistant and tear proof nylon fabric coated with tough polyurethane and treated with an antistatic inhibitor. Unlike cheap PVC covers they may be washed and ironed. Covers are grey with blue piping.

Computer Covers

❒ 520STFM/1040STF/STE £5.45
❒ Falcon030 £5.45

Monitor Covers

❒ 12" monitors £6.95
❒ 14" monitors £6.95

Please specify monitor make and model:

Printer Covers

❒ Dot Matrix Printers £5.95
❒ Lasers/Deskjet £7.95

Please specify printer make and model:

Books

❒ Users' Guide to 1st Word	£ 6.95
❒ ST 3D Graphics Programming	£22.95
❒ Atari ST Basic To C	£18.45
❒ ST Disk Drives: Inside And Out	£18.95
❒ ST Machine Language	£18.45
❒ Atari ST Programmer's Guide	£22.95
❒ Desktop Publishing: The Book	£ 6.95
❒ Introducing ST Machine Code	£19.75
❒ Midi and Sound Book for ST	£17.25
❒ Musical Applications of the ST	£ 5.95
❒ Tech Ref Guide Atari ST Vol 2	£19.95
❒ Tech Ref Guide Atari ST Vol 3	£22.95
❒ Guide to Timeworks DTP	£ 9.95
❒ Your First Basic	£14.95
❒ C-Manship Complete Atari ST	£14.94
❒ ST Assembly Lang' Workshop	£14.95

Ordering

☑ ... Tick the items you require and send this advert, a photocopy, or just a list on a sheet of paper with your name and address, along with a cheque or Postal Order, to us at: ST Club, 2 Broadway, Nottingham, NG1 1PS. Please allow up to 4 days for your goods to reach you. Sorry, we do not take credit card orders or telephone orders.

Overseas Orders Welcome - Please request a copy of our Overseas Price List. **Membership** - You do not have to join or subscribe before you can buy from us, and you are not under any on-going obligation to buy from us when you do subscribe.

£____.___ Cheque/PO enclosed.

From:.....

.....

.....

.....

.....

☑ ...Delivery FREE
☑ ...VAT included in all prices
☑ ...Catalogues & Telephone support FREE

STR#2

CUE AUDIO!

After a year of speculation, Cubase Audio for the Falcon has finally arrived. Ofir Gal starts abusing his hard drive...



Several windows may be open at once allowing quick access to many of Cubase Audio's features.

Although other software houses have beaten Steinberg to the market with several digital audio recorders, *Cubase Audio* appears to be the ultimate musician's tool. Boasting full integration between MIDI and digital audio, with a user interface that has made *Cubase* one of the prime sequencers across the ST, PC and Mac, does the final product measure up to the paper specification?

WHAT YOU GET

Cubase Audio comprises two hard back ring-bound manuals along with the disks and dongle in a neat hard box. The first manual covers the MIDI side and is more or less identical to the standard version 3 manual although the installation chapter has been revised and now covers the specifics of audio recording such as disk speed. The second manual is dedicated to the audio functions.

As you probably know (*unless you've been on Mars for the past five years... Ed*), *Cubase* is copy-protected with a dongle that plugs into the cartridge port of the Falcon. In addition, another key is plugged into the DSP port at the rear, providing the industry standard 44.1kHz sampling clock. Strangely, Steinberg have not added support for the 48kHz sampling rate used by many DAT recorders.

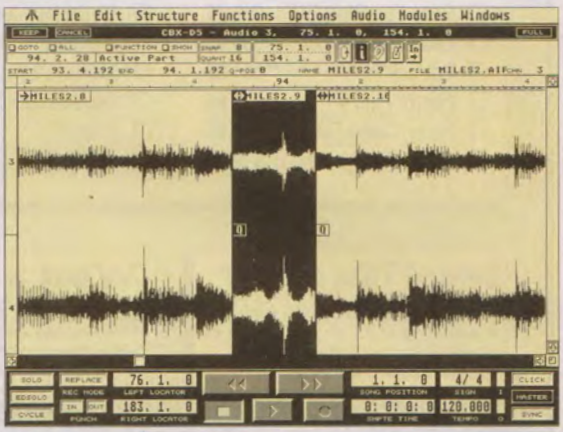
The program comes on a high density disk along with the various modules. Two other disks contain fonts for the score module, IPS, MIDI Mixer maps and various utilities.

WHAT IT DOES

While some minor changes have been made, mostly visual, version three owners will feel at home here – the familiar transport bar and editors are all there as before. All the audio related features are located in a new menu entitled "Audio".

Audio and MIDI recording are very similar. A track is selected in the normal way and the left/right locators are used to set drop in/out points. There is no limit to the number of audio tracks except that the maximum active number at any time is eight. If you try to play more, new recordings will cut out older ones, as is the case with an eight note polyphonic sampler such as the Akai S950.

An audio recording creates two files on disk. The larger one contains the actual audio data while a smaller one is an image file used for display of the waveform and further editing. This has the advantage of not requiring the waveform to be created in real-time – scrolling through the



The Audio Editor can handle more than one audio track at a time and even stereo tracks.

Waveform Editor is very fast. A 30Mb audio file requires an additional 100Kb file for the image.

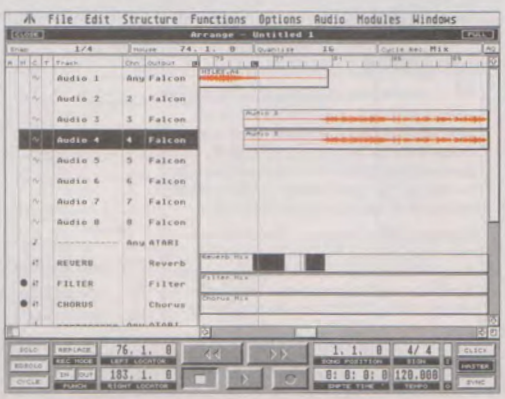
Audio and MIDI parts appear alongside each other in the Arrange window, a miniature image of the waveform depicting an audio track. This is a useful feature as you can still see the peaks in sound, even at the smallest magnification. As always, the Arrange page can be squeezed and stretched with the right mouse button. Audio parts can be treated just like normal parts – cut, move, copy, delete and so on.

The Waveform Editor is used to edit audio parts and several can be selected and edited at once. The editor features the usual toolbox with a pencil, rubber, scissors and more. Everything is as similar as possible to the Key Editor and very intuitive to use.

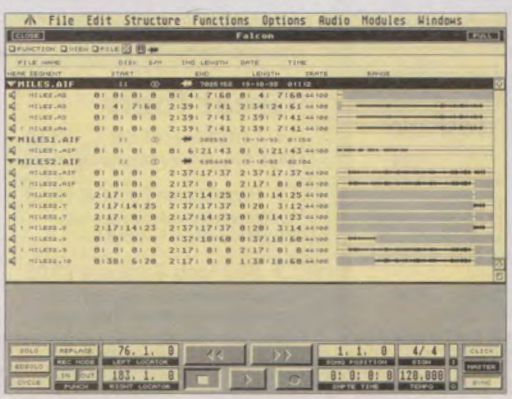
ONE, TWO, RECORDING

Before you can start recording, the Hardware Setup window has to be accessed and the input levels set. Here you are presented with the first hurdle as far as *Cubase Audio* is concerned. The input levels on the Falcon are preset for a microphone and are far too sensitive for the line level of a mixing desk. Steinberg recommends fitting resistors to both the input and output sockets of the Falcon although this can also be achieved externally by fitting resistors to a cable. If this sounds alarming, it isn't – even I could do it (*it must be easy... Ed*). Analogue attenuation of the input by a further 22.5dB and a clip indicator are also provided as is a variable output level.

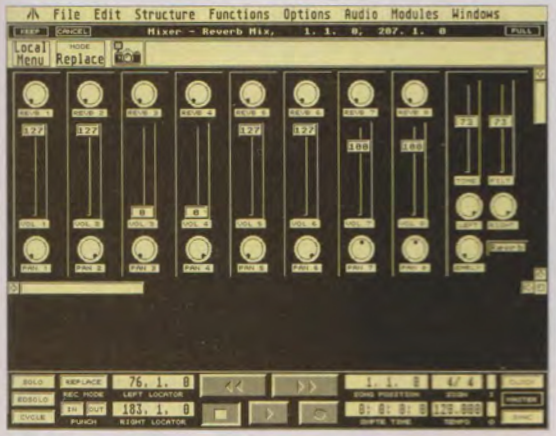
The next step is to select a track in the Arrange window. Any track can be used for audio by clicking on the track type icon and changing it from MIDI to audio. As with MIDI, you can select a channel between 1 and



A miniature waveform representation is displayed on each audio track in the Arrange window.



All audio files are listed in the Audio Pool. Whole files or segments can be dropped into the Arrange or Audio Edit windows.



Cubase's MIDI Mixer provides full mix control and automation.

8 for the track; a setting of "Any" enables stereo recording which uses up two of the eight available audio channels.

The Monitor window is used for the monitor settings – an audio channel can play back existing files or monitor the input. In addition, there are level meters with peak indicators, monitor level faders and a mute button. A click on the file name button selects the file name and destination for the track; if you forget to do this, *Cubase* reminds you as you try to start recording. You only need to name a track once – any further overdubs and edits are automatically named. Lastly, a stereo bus fader is used to set the overall monitor level.

Although this process may seem lengthy on paper, it is very quick and simple in practice. After all, any audio recording – digital or otherwise – requires some level adjustment.

MORE SOUND

Recording additional tracks is as simple as selecting a new track. Any existing tracks can be set to mute or play-back status.

Cycle mode does not operate with audio recording, although you can still enable it for play-back. The same applies to Overdub since there is only one "voice" per track. While you can only record one mono or stereo track at a time, you can record MIDI while recording audio. When playing back in Cycle mode, *Cubase* manages to play audio tracks in cycle without any gaps or glitches. Impressive.

JUMP IN THE POOL

The Audio Pool is a listing of all recorded audio files. The list is cleverly designed for maximum flexibility and is capable of far more than just listing the files.

Each file can be made up of several segments which are usually the result of edits in the Audio Editor. Each segment has an entry showing the waveform image and some information about it such as length and location on disk. Files or segments can be dragged from the pool into the Arrange window, the Audio Editor or the Sampler (more about this later). As you can freely place a segment anywhere you wish, a library of sound effects and samples can easily be created which you can use in any song as sound files can be shared between songs.

MAKING CHANGES

No digital audio package is complete without a waveform editor and the one on offer here is very powerful. The Audio Editor is similar in appearance to the Key Editor and includes the same mouse tools although their operation is slightly different. The eight tools enable selection and moving of audio events, deleting or temporarily muting sounds, cutting, moving and importing events from the pool.

As with other editors, more than one track or part can be edited at the same time. The audio tracks are displayed in separate "lanes" and sound events can be moved from one lane to another by simply grabbing and dragging with the mouse while holding the <Shift> button down.

Initially, you are presented with a waveform the length of your recording, but you can chop it into segments using the scissors tool – and the cut point is inaudible. Copying of segments is achieved by using the Cut, Copy and Paste functions from the menu bar.

Three markers are associated with each segment; beginning, end and a "Q". Nothing to do with Star Trek – it's used to quantise segments. By freely placing the Q marker, normally on the peak of the sound, you can ensure that error correction is as effective as possible. *Cubase* automatically places the Q point on a beat.

As with parts, you can make "real" copies of segments but these create

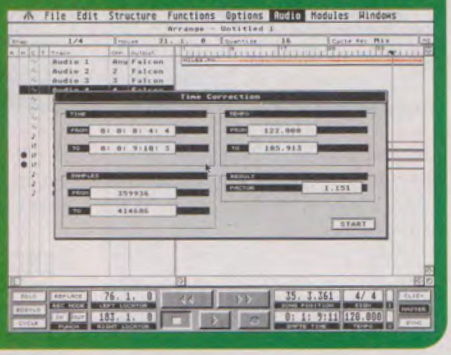


All audio related functions are displayed under the Audio menu.

TIME COMPRESSION

This useful feature utilises the DSP for extra fast processing. Whole audio files can be stretched or squeezed by up to 50% either way without altering their pitch.

The process requires some free memory and takes approximately 2.5 times the file length. The Time Stretch window lets you match tempi, fit a sample into a given time or just change it by a percentage. Subtle changes sound surprisingly good, but as might be expected, more radical settings produce very synthetic sounding results.



All audio files are listed in the Audio Pool. Whole files or segments can be dropped into the Arrange or Audio Edit windows.

MEMORY AND DISK SPACE

***Cubase* records at a fixed frequency of 44,100 samples per second. Each sample is 16 bits (2 bytes) so 86Kb is needed per second for each track. Theoretically, a four minute song, using all eight tracks continuously, requires 165Mb of disk space. In reality however, you wouldn't have all eight tracks playing continuously so 100Mb would probably suffice. Additionally, *Cubase Audio* requires a SCSI hard disk which means that you cannot use the internal drive no matter how fast or large it is.**

***Cubase Audio* requires at least 4Mb of memory. The program loads but using the RAM tracks or the sampler is virtually impossible. Steinberg recommend 14Mb for serious work as this reduces the amount of disk access.**

- ✓ Powerful integrated system
- ✓ Extensive editing facilities
- ✓ Full mix automation

PROS AND CONS

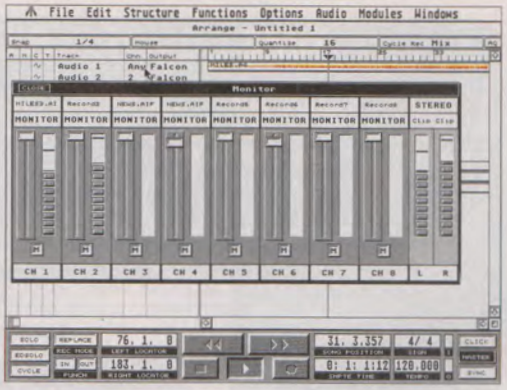
- ✗ A little slow
- ✗ No support for 48kHz sampling rate
- ✗ Requires an external drive

"A superb integrated digital audio and MIDI package for the Falcon."

NAME: CUBASE AUDIO v1.01
COMPANY: HARMAN AUDIO
CONTACT: 081-207 5050
PRICE: £799
MIN MEMORY: 4MB, 14MB RECOMMENDED
SYSTEM: FALCON

EASE OF USE	✪✪✪✪✪
DOCUMENTATION	✪✪✪✪✪
EFFECTIVENESS	✪✪✪✪✪
VALUE FOR MONEY	✪✪✪✪✪

OVERALL 89%



The monitor section provides a visual level display and control of monitoring levels.

new files on disk. When using ghost segments, any edits made to the originals take immediate effect on all of its ghost copies.

Finally, you can also draw volume curves for the audio segments – who says the Falcon can't deliver good digital audio features?

SPECIAL FX

Cubase Audio uses the MIDI Mixer to provide full mix automation plus one digital effect – there's a choice between a parametric equaliser, reverb and a double chorus effect. Each channel has its own effect send, volume and pan control, all of which are recordable in real-time so allowing full mix automation and total recall.

The effects are nice but no match for an external effects unit in either quality or features. Nevertheless, they come in handy on occasion. As for the mix automation, it's absolutely flawless.

OTHER FEATURES

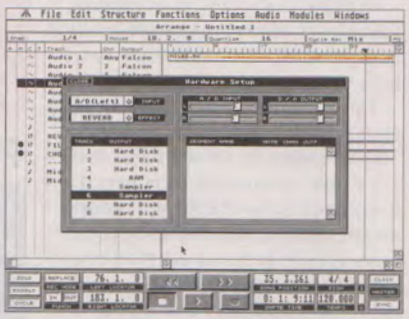
You can mix down several tracks into a stereo or mono track making it possible to record more than eight audio channels. Remix is not possible though, so this is a destructive process.

Another important feature is *Time Stretch*, a mini version of the *Time Bandit* software available for the Mac. *Cubase* can even generate SMPTE code which appears to be very accurate.

The sampler section enables triggering of samples in real-time via a MIDI keyboard. The samples can be mapped across the keyboard just as with a stand-alone sampler but the facility is really only useful if you have 14Mb of RAM installed.

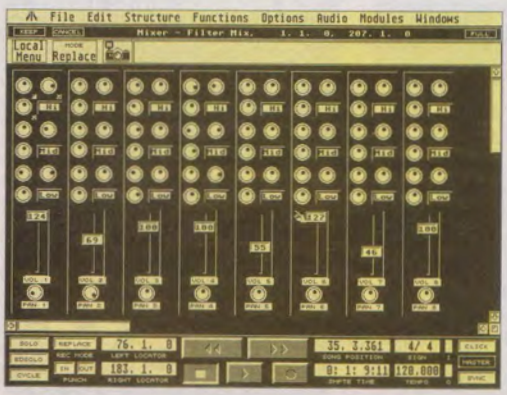
VERDICT

Cubase Audio is one mighty beast of a program. While not yet perfect, Steinberg are continuing to work on further improvements. One feature obviously lacking is that of "strip silence", which lets you erase silent sections and free up some disk space, but the latest word from Steinberg is that a new version with this and other new features, like a DAT backup tape streamer and a digital input/output interface, is in the works.



Initial record and playback levels are set in the Hardware Setup window. The input source and effect are also chosen here.

Not all hard disks are capable of playing back eight tracks; you need the fastest disks available to achieve that along with 14Mb of RAM. This is no "power without the price" package making *Cubase Audio* a program for the professional user. But in this category, *Cubase Audio* currently has no equal on the Falcon.



There's a three band parametric equaliser with gain, frequency and Q value per channel.

THE COMPETITION

Currently, *Cubase Audio* has no direct competition as no other digital audio package for the Falcon incorporates MIDI. There are two contenders as far as audio recording is concerned. D2D's *4TFX* is a four track system that can run as a desk accessory. Editing is provided via a separate program that uses a different file format, so files have to be converted back and forth between the two programs. *DigiTape* is a more serious application aimed at the high end user. While it does not include any MIDI sequencing, it does boast some very powerful editing facilities.

***Notator Logic Audio* should be released in the not too distant future. Rest assured that we'll review it as soon as possible...**

STEP BY STEP

CUTTING AND PASTING AUDIO

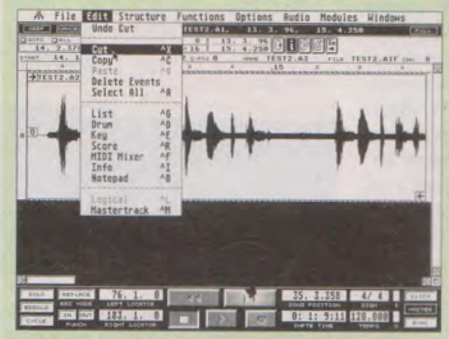
To say that cutting, copying and pasting digital audio is easy with *Cubase Audio* is an understatement. Here's how it's done...



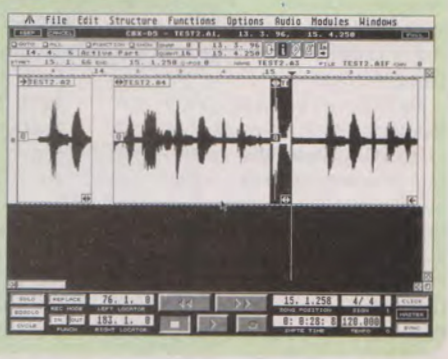
1 ***The Audio editor lets you cut sections by using the scissors tool. The other tools are for moving, muting, deleting and so on.***



2 ***Select the section by clicking on it just as you would with a MIDI event.***



3 ***Using the edit menu, cut the section out, move the song position to the required point and select Paste.***



4 ***The section is moved and placed in its new position. If the Snap To Zero option is enabled, Cubase creates a seamless join between the segments.***

SEIKOSHA PRINTERS

Silica are pleased to recommend the high quality range of Seikosha printers, built by a company that is used to manufacturing quality precision products. Seikosha are part of the massive Seiko/Epson group with a turnover of £6 billion and 18,000 staff! Every dot matrix printer from Silica comes with a free printer starter kit which includes all you need to get up and running with your new Seikosha printer (see below).

NEW! COLOUR 24-PIN £169 EXC VAT

FREE! FROM SILICA

- **DELIVERY** *Next day - anywhere in the UK mainland.*
- **HELPLINE** *Technical helpline during office hours.*
- **AMIGA DRIVER** *Seikosha Plus Printer Driver with every SL-96*

For extra high quality output. Features include:

- Definable Dither Routines
- 16-point Colour Adjustment
- Ink Compensation Correction
- Workbench 2/3 GUI
- Prints up to 256 Shades of Grey
- Enhanced Print Speeds
- Full Control of Printer Typefaces, Graphics/Paper Size, Margins

- **STARTER KIT** *With every Seikosha dot matrix printer*



Every Seikosha dot matrix printer from Silica comes with a FREE Starter Kit, worth £29.38 (£25+VAT).

- ***3½" Disk with Amiga & ST Printer Drivers***
- ***1.8 Metre Parallel Printer Cable***
- ***200 Sheets of Quality Continuous Paper***
- ***50 Continuous Tractor Feed Address Labels***
- ***50 Continuous Tractor Feed Disk Labels***

9-PIN 80 COLUMN 192 CPS



- *Seikosha SP-1900 Plus*
- *9-Pin Dot Matrix*
- *80 Column*
- *192cps Draft, 48cps NLQ*
- *1K Printer Buffer + 2 Fonts*
- *Parallel Interface*
- *Graphics Resolution: 144 x 72dpi*
- *Epson and IBM Emulation (Windows compatible using Epson/HP drivers included as standard in Windows 3.1.)*
- *Automatic Sheet Feeder Option*
- *Auto Paper Load, Paper Parking*
- *FREE Silica Printer Starter Kit*

RRP ~~£149~~ **SAVE £40**

PRINTER RRP	£149
STARTER KIT	£25
TOTAL VALUE:	£174
SAVING:	£65
SILICA PRICE:	£109

£109 + VAT = £128.08 PRI 8195

9-PIN 80 COLUMN 300 CPS



- *Seikosha SP-2400*
- *9-Pin Dot Matrix*
- *80 Column*
- *300cps SD, 240cps D, 60cps NLQ*
- *21K Printer Buffer + 5 Fonts*
- *Parallel and Serial Interfaces*
- *Graphics Resolution: 240 x 144dpi*
- *Epson and IBM Emulation (Windows compatible using Epson/HP drivers included as standard in Windows 3.1.)*
- *Optional Auto Sheet Feeder Unit*
- *FREE Silica Printer Starter Kit (Wide Carriage Model Available SP-2415 - £219 +VAT = £257.33 PRI 8215)*

RRP ~~£185~~ **SAVE £46**

PRINTER RRP	£185
STARTER KIT	£25
TOTAL VALUE:	£210
SAVING:	£71
SILICA PRICE:	£139

£139 + VAT = £163.33 PRI 8204

24-PIN 80 COLUMN 240 CPS



- *Seikosha SL-90PLUS*
- *24-Pin Dot Matrix*
- *80 Column*
- *240cps SD, 192cps D, 84cps LQ*
- *20K Buffer + 9 Fonts*
- *Parallel Interface*
- *Graphics Resolution: 360 x 360dpi*
- *Epson LQ850 Emulation*
- *Windows Driver as Standard*
- *Semi-Automatic Sheet Feeder, Paper Parking, Optional Automatic CSF*
- *FREE Silica Printer Starter Kit*

RRP ~~£189~~ **SAVE £50**

PRINTER RRP	£189
STARTER KIT	£25
TOTAL VALUE:	£214
SAVING:	£75
SILICA PRICE:	£139

£139 + VAT = £163.33 PRI 8293

24-PIN COLOUR PRINTER



240 CPS 80 COLUMN

- *Seikosha SL-96*
- *24 pin - Dot Matrix*
- *240cps SDraft, 84cps LQ*
- *42K Printer Buffer*
- *2 Scalable Fonts + 8 Bitmap Fonts*
- *Parallel Interface*
- *Graphics Resolution: 360 x 360 dpi*
- *Epson LQ870 Emulation with Colour Function*
- *Colour Windows Driver as Standard*
- *Colour Printing as Standard (Includes Colour Ribbon - Black Ribbon Optional Extra)*
- *Friction Feed/Push Tractor*
- *Optional Automatic Cut Sheet Feeder*
- *FREE Silica Printer Starter Kit*

RRP ~~£249~~ **SAVE £80**

PRINTER RRP	£249
STARTER KIT	£25
TOTAL VALUE:	£274
SAVING:	£105
SILICA PRICE:	£169

£169 + VAT = £198.58 PRI 8311

180CPS INKJET



180 CPS 80 COLUMN

- *SpeedJET 200 - Inkjet Printer*
- *50 Nozzle Inkjet Head*
- *180 CPS Draft,120 CPS LQ (10cpi)*
- *Print Through 2.67 Pages Per Minute*
- *128K Printer Buffer - 3 Built-In Fonts*
- *1 x IC Card Slot for Buffer Expansion/Fonts*
- *Parallel Interface - Graphic Resolution 300 x 300dpi*
- *HP Deskjet Plus Emulation (PCL3+)*
- *Windows Driver Standard*
- *Semi Automatic Single Sheet Feeder*
- *Optional Automatic Sheet Feeder - 70 Sheets (£35 + VAT)*
- *Ultra-Quiet - Less Than 45 dB/A*

RRP ~~£235~~ **SAVE £56**

PRINTER RRP	£235
TOTAL VALUE:	£235
SAVING:	£56
SILICA PRICE:	£179

£179 + VAT = £210.33 PRI 8022

300CPS INKJET



300 CPS 80 COLUMN

- *SpeedJET 300 - Inkjet Printer*
- *High Capacity 128 Nozzle Head*
- *24K Printer Buffer - 3 Built-in Fonts*
- *Large Ink Tank - up to 4.2 Million Characters*
- *300 CPS Draft (10cpi) - 300 CPS LQ (10cpi) 80% Faster Than Most of the Competition*
- *2 IC Card Slots for Buffer Expansion + Fonts*
- *Parallel Interface - Graphics Res. 300 x 300dpi*
- *HP Deskjet Emulation PCL3 - (Windows compatible using Epson/HP drivers included as standard in Windows 3.1.)*
- *Built-in Automatic Sheet Feeder - 100 Sheets*
- *Economical to Run - only 1.3p per page*
- *Ultra Quiet - 46dB(A) Maximum*

RRP ~~£359~~ **SAVE £110**

PRINTER RRP	£359
TOTAL VALUE:	£359
SAVING:	£110
SILICA PRICE:	£249

£249 + VAT = £292.58 PRI 8030

4PPM LASER



4 PPM 300 DPI

- *OP-104 - 4 Pages per minute*
- *HP LaserJet IIP™ Emulation (Windows compatible using Epson/HP drivers inc. as standard in Windows 3.1.)*
- *Resolution: 300x300dpi - 14 Fonts*
- *Uses Original HP® Font Cards*
- *Postscript Emulation Option (Extra)*
- *Optional IBM, Epson & Diablo Emulation Cartridges*
- *Centronics Parallel & RS232C/RS422 Serial Interfaces*
- *512K RAM - expandable to 2.5Mb*
- *Flexible paper handling: Standard paper cassette - 100 sheets, Optional 2nd bin - 300 sheets*
- *Cable required: CAB 7500 for PC - £9.95 or CAB 7614 for ST/Amiga - £12.95*

RRP ~~£899~~ **SAVE £480**

PRINTER RRP	£899
TOTAL VALUE:	£899
SAVING:	£480
SILICA PRICE:	£419

£419 + VAT = £492.33 LAS 6004

THE SILICA SERVICE

SILICA 1978 15 1993 YEARS SERVICE TO YOU

Before you decide when to buy your new printer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after you have made your purchase, when you may require additional peripherals and accessories, or help and advice. And, will the company you buy from contact you with details of new products? At Silica, we ensure that you will have nothing to worry about. With our unrivalled experience and expertise, we can meet our customers' requirements with an understanding which is second to none. Complete and return the coupon now for our latest FREE literature and begin to experience the "Silica Service".

- **FREE OVERNIGHT DELIVERY:** On all hardware orders shipped in the UK mainland.
- **TECHNICAL SUPPORT HELPLINE:** A team of technical experts will be at your service.
- **PRICE MATCH:** We match competitors on a "Same product - Same price" basis.
- **ESTABLISHED 15 YEARS:** We have a proven track record in professional computer sales.
- **PART OF A £50M COMPANY** (with over 200 staff): We are solid, reliable and profitable.
- **BUSINESS + EDUCATION + GOVERNMENT:** Volume discounts are available. Tel: 081-308 0888.
- **SHOWROOMS:** We have demonstration and training facilities at all our stores.
- **THE FULL STOCK RANGE:** All of your requirements are available from one supplier.
- **FREE CATALOGUES:** Will be mailed to you with special offers and full details of hardware, peripherals and software.
- **PAYMENT:** We accept most major credit cards, cash, cheque or monthly terms. (APR 29.8% - written quotes on request).

SILICA

HOT LINE 081-309 1111

MAIL ORDER:	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX Order Lines Open: Mon-Sat 9.00am-7.00pm (Sat 9.00am-5.30pm) No Late Night Opening	**Tel: 081-309 1111** Fax No: 081-308 0608
CROYDON SHOP:	Debenhams (2nd Floor), 11-31 North End, Croydon, Surrey, CR9 1RQ Opening Hours: Mon-Sat 9.00am-6.00pm Late Night: Thursday - 9pm	**Tel: 081-688 4455** Fax No: 081-686 4658
ESSEX SHOP:	Keddies (2nd Floor), High Street, Southend-on-Sea, Essex, SS1 1LA Opening Hours: Mon-Fri 9.30am-5.30pm (Sat 9.00am-6.00pm) Late Night: Thursday - 7pm	**Tel: 0702 468039** Fax No: 0702 468039
IPSWICH SHOP:	Debenhams (2nd Floor), Waterloo House, Westgate St, Ipswich, IP1 3EH Opening Hours: Mon-Fri 9.30am-5.30pm (Sat 9.00am-6.00pm) Late Night: Thursday - 8pm	**Tel: 0473 287092** Fax No: 0473 287092
LONDON SHOP:	52 Tottenham Court Road, London, W1P 0BA Opening Hours: Mon-Sat 9.30am-6.00pm No Late Night Opening	**Tel: 071-580 4000** Fax No: 071-323 4737
LONDON SHOP:	Selfridges (Basement Arena), Oxford Street, London, W1A 1AB Opening Hours: Mon-Sat 9.30am-7.00pm Late Night: Thursday - 8pm	**Tel: 071-629 1234** Extension: 3914
SIDCUP SHOP:	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX Opening Hours: Mon-Sat 9.00am-5.30pm Late Night: Friday - 7pm	**Tel: 081-302 8811** Fax No: 081-309 0017

To: Silica, STREV-0194-84, 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX

PLEASE SEND A BROCHURE ON THE SEIKOSHA RANGE

Mr/Mrs/Miss/Ms: ..... Initials: ..... Surname: .....

Company Name (if applicable): .....

Address: .....

..... Postcode: .....

Tel (Home): ..... Tel (Work): .....

Which computer(s), if any, do you own? 84P

E&OE - Advertised prices and specifications may change - Please return the coupon for the latest information.

12.3

FIRST COMPUTER CENTRE (LEEDS) Tel:0532 319444

"VOTED BEST DEALER CU AMIGA JAN 93"

FIRST
COMPUTER CENTRE
OPEN 7 DAYS A WEEK

OPEN MON - SAT.....9.30AM-5.30PM
SUNDAY OPENING.....11.00AM-3.00PM
THURSDAY NIGHT LATE...9.30AM-7.30PM
OPEN MOST BANK HOLIDAYS

♦

PREFERRED DEALERS FOR ACORN, CITIZEN, COMMODORE, DIGITA, PACE, PRIMA, SEGA, ROMBO, STAR, SUPRA, US ROBOTICS

♦

HOW TO ORDER

Order by telephone quoting your credit card number. If paying by cheque please make payable to the:
"FIRST COMPUTER CENTRE."
In any correspondence please quote a phone number & post code. Allow 5 working days for cheque clearance

- All prices include VAT
- All hardware/computers are genuine UK spec.
- Interest terms available

UK MAINLAND DELIVERY TARIFFS

- Standard Delivery.....£1.00
- Guaranteed 2 to 3 day (week days) Delivery.....£2.50
- Guaranteed Next Day (week days) Delivery.....£4.90
- Open seven days a week
- 1100 sq. ft. showroom
- Free large car park
- Overseas orders welcome
- Full repair service

Educational orders welcome

♦

SALES & TECHNICAL

24 HOUR MAIL ORDER SERVICE 6 LINES!

0532 319444

FAX: 0532 319191

♦

FOR DESPATCH & RETURNS ENQUIRES TEL. 0532 319444

♦

SHOWROOM ADDRESS:
DEPT. STR, UNIT 3, ARMLEY PARK COURT, OFF CECIL STREET, STANNINGLEY ROAD, LEEDS, LS12 2AE.
(Follow A647 signs from Leeds City Centre)
Easy access from A1, M1 & M62
Prices are subject to change without notice. E&OE.

AMERICAN EXPRESS · Access · VISA · SWITCH · MasterCard · EUROCARD

2% surcharge on AMEX

COMPUTERS

THE ATARI FALCON

16 Mhz 32 bit technology for fast processing, 1.44 Mb floppy disk, 1, 4 or 14 Mb configurations. Software bundle comes with CALAPPT personal information manager, Procalc spreadsheat, Talking Clock, plus Landmines and Breakout

1mb 0HD.....£494.99
4mb 0HD.....£689.99
4Mb 65 Mb HD.....£789.99
4Mb 127 Mb HD.....£889.99
4Mb 209 Mb HD.....£989.99

♦

ATARI 520STE REFURB PACKS

This is a imited offer while stocks last. We have a large quantity of as new refurbished 520STE's from only £109.99 with full 12 month warranty. Software packs available, please ring for details

only £109.99 for STE base packs
or £124.99 with STE software packs
JUST ADD £15.00 FOR 1Mb VERSION
Atari STFM Refurb packs also available from just £79.99!

♦

ATARI 520 STFM

includes STOS, Neochrome, First Basic, ST Tour, Bomb Jack, Carrrier Command, Out Run, Space Harrier & Discover ST book

only £146.99

♦

ATARI 1Mb DISCOVERY PACK

This pack now comes with: Sim City, Final Fight, 9 Lives, First Word word processor, Neochrome, animation package & ST Basic.

now only £199.99!

♦

We can also upgrade the Atari STE Discovery pack:

1 Meg version.....£209.99
2 Meg version.....£POA
4 Meg version.....£POA

♦

THE 1040 STe FAMILY CURRICULUM PACK

With 1 Meg as standard this pack must be one of the best educational packages. Inc. ST Word, ST Base, Hyperpaint 2, Music Maker 2, First Basic, Micro Maths, French Mistress language tutor, Reading tutor & general knowledge tutor, Mouse & manuals

now only £199.99

♦

THE 1040 STe MUSIC MASTER PACK

With 1 Meg as standard this pack must be one of the best musical packages. Includes Steinberg Pro 24 III which has the ability to record & play up to 24 tracks simultaniously also includes Mouse & manuals

now only £199.99

FIRST EXTRAS PACK

With the *FIRST EXTRAS* Pack you can make sure you have every thing you need when buying an Atari. Contains:

- Top quality microswitched Powerplay Cruiser joystick
- Mouse Mat
- Dust Cover
- 10 high quality Blank Disks
- Plus 3 extra games!!

only £29.99

CALAMUS DTP

Calamus 1.09n.....£94.99
Calamus S v2.....£319.99
Calamus SL.....£549.99
Calamus Outline Art .V3.£234.99

TIMEWORKS/IST WORD PLUS SPECIAL OFFER!!

This excellent bundle comes with Timeworks 2 and First Word Plus 3.2
only £84.99
or First Word Plus 3.2..only £45.99
and TimeWorks 2..only £39.99

PRINTERS

OKI · Canon · CITIZEN COMPUTER PRINTERS · SEIKOSHA · HEWLETT PACKARD · THE STAR COMPUTER PRINTERS

All our printers come with ribbon/toner, printer drivers (if available), paper & cables!!

CANON

Canon BJ10sx.....£199.99
Laser quality output. Large buffer
Canon BJ200.....£304.99
3 page a min speed, 360 dpi, small footprint & 80 page sheetfeeder
Canon BJ230.....£359.99
wide carriage version of above
Canon BJ300.....£419.99
Desktop bubble jet with laser quality
Canon BJ330.....£464.99
Wide carriage version of the BJ300
New! Canon BJC600 Col..£559.99
new bubble jet from Canon
BJ10 Autosheetfeeder...£49.99
Canon BJ10 cartridge.....£18.99

CITIZEN *NEW LOW PRICES!*

Citizen printers have a 2 year guarantee
Swift 90 Colour.....£169.99
Excellent value 9 pin colour. Highly recommended
Swift 200 Colour.....£204.99
Same out put as the 240 but with less facilities
Swift 240 Colour.....£249.99
24 pin, 240cps draft, 10 fonts, quiet mode, 240cps.
NEW! Projet II.....£254.99
new inkjet printer with built in auto sheet feeder
Swift Auto Sheet feeder..£79.99

HEWLETT PACKARD

HP Deskjet Portable..only £274.99
New! HP510 mono.now £261.99
HP 500 Colour.....now £309.99
HP 550 Colour.....now £484.99
4 times faster than the HP500C!!
HP500 mono cartridges.....£14.99
Double life 500 cartridges.....£24.99
All HP printers come with a 3 year warranty

SEIKOSHA

Seikosha SP-1900.....£124.99
Seikosha SP-2400.....£154.99
Seikosha SL-90.....£159.99
Seikosha SL-95.....£295.99
Seikosha Speedjet 300...£319.99
12 month extended warranty £10.00

STAR

StarLC20.....£132.99
180 cps draft, 45 cps NLQ, quiet mode and multi fonts, push button operation.
Star LC100 colour.....£139.99
9 pin colour, 8 fonts, 180 cps draft, 45 cps NLQ
Star LC200 colour.....£195.99
9 pin colour, 8 fonts, 225 cps draft, 45 cps NLQ, A4 landscape printing.
NEW! Star LC24-30 Col.....£229.99
NEW! Star LC24-300 Col.....£299.99
24 pin quality, 210 cps draft, 67 cps LQ, 39K buffer expandible to 48K, 10 fonts and quiet mode.
Star LC24-200 colour.£264.99
Colour version with 30K buffer expandable to 62K
Star SJ48 Bubble jet.....£205.99
Laser quality, ultra quiet, Epson compatible & portable
NEW! Star SJ144 Colour Thermal
Stunning affordable colour printer. 3 PPM, low running costs
only £499.99
Star SJ48 Autosheet feeder.....£49.99
Star SJ48 cartridge.....£18.99
Star SJ144 cartridge (pack of 3).....£42.99
Star SJ48/BJ10 Refill kit.....£11.99

Laser Printers

on-site warranty standard
Seikosha OP-104.....£579.99
4 PPM HP2P emulation
HP Laserjet 4L.....£609.99
1Mb RAM, 4 ppm, small footprint
OKI 400e.....£514.99
4 page laser, mult font, 512k memory, HP emulation
Ricoh LP1200.....£669.99
add just £114.99 for 2 Mb of extra RAM

MONITORS

All our monitors are UK spec. All monitors come complete with a free Atari lead.

Sonica Colour Monitor

Colour stereo monitor. medium resolution, Replaces the the Philips 8833 which is no longer available
only £194.99

The ATARI Hi-Res mono

Ideal for use with the new Falcon computer, this 14" monitor is not however compatible with the ST/STe. Inc. built in tilt & swivel stand.
only £119.99

PRIMA *Trust* Hi-Res

High resolution 14"mono monitor. 640 * 400 resolution. Stable image and razor sharp quality. Comes with built in tilt & swivel monitor stand
only £129.99

Prima Colour SVGA

High quality colour SVGA monitor. .28 dot pitch. For use with the Falcon
only £254.99

Sharp TV/Monitor

comes with full remote control
only £189.99

MICRODEAL PRODUCTS

Concerto.....£29.99
Clarity (Falcon).....£74.99
Playback Stereo Cartridge.....£29.99
Replay 8.....£66.99
Replay 16.....£99.99
Stereo Master.....£29.99
Quartet Sequencer.....£47.99
Video Master Sampler.....£49.99
Video Master (Falcon).....£74.99
Video Master RGB.....£109.99
Colour Master RGB Splitter..£49.99
Music Multi Pack.....£35.99

SUPRA MODEMS

Supra-Fax 144LC V.32 bis (14400 baud !)

Low cost version of the classic V32Bis Fax modem. Features as below but class 1 fax only and LED display
only £159.99!

The Supra-Fax Modem V.32 bis (14400 baud !)

Send & receive fax messages using fax s/w. This new modem from Supra has full 14400 baud capability. Spec includes V.32bis, V.32, V.22bis, V22, V21, MNP2-5, V.42, V42bis, Class 1 & 2 commands, 9600/14400 Group 3 Fax. Includes free modem comms s/w & cable!!

FREE COMMS software!! · **only £209.99!** · 5 YEAR WARRANTY!!

♦

Supra Fax Plus.only £119.99

Send & receive faxes!(needs FAX s/w) Even faster than the standard 2400 from Supra with auto dial & auto receive. 9600 bps Hayes comp. V22Bis, V42 Bis, MNP 2-5 & auto adjust to maximise transmission speeds. Includes free modem comms s/w & cable!!

♦

Supra 2400....only £64.99

Get on line using this great value fast modem with auto dial & receive. 2400 baud Hayes comp, V22 BIS. Includes free modem comms s/w & cable!!

Straight fax software only £39.99!!
Fax software is not included with Supra modems
All Supra Modems come with a 5 year warran

US ROBOTICS

PREFERRED DEALERS

Sportster 2496 +FAX.....£145.99
Sportster 14400 FAX.....£245.99
WorldPort 14400 +FAX.....£251.99
Courier HST (16.8).....£469.99
Courier V32bis Terbo +FAX.....£449.99
Courier HST/Dual 16.8 Fax.....£486.99
Courier HST/Dual 16.8 Terbo Fax..£556.99
If you thought V32bis was fast try the terbo! They come with a 5 year warranty & are *BABT Approved!*

PACE MODEMS

MicroLin V22b FAX £175.99
MicroLin V32b FAX £274.99
5 year warranty *and FULLY BABT Approved !!*

New! VIDI 12 ST BY ROMBO

As official dealers for Rombo, we are able to offer this excellent package at a great price. Vidi 12 ST replaces the famous Complete Colour Solution with a higher specification but a lower price!

only £105.99

VIDI-ST

High quality digitizing. Inc Vidi chrome colourising software

only £79.99

RGB SPLITTER

Enables you to Colour Digitise in a second. Replaces red green blue filter set. Can be used with all Rombo products

NEW!! LOW PRICES!

only £54.99

ICD FA-ST HARD DRIVES

These drives are autobooting, They also have a small footprint , fast access and are VERY QUIET. The DC range come with a built in real time clock and disk cache as standard that can reduce disk accessing time by 50%. Standard warranty 1 year.

FA-ST Controller (no HD)
only £179.99

FA-ST 52DC.....19ms
only £339.99

FA-ST 105DC.....16ms
only £349.99

FA-ST 170DC.....16ms
only £379.99

FA-ST 213DC.....16ms
only £399.99

FA-ST 245DC.....16ms
only £439.99

FA-ST 330DC.....16ms
only £494.99

FA-ST 520DC.....16ms
only £815.99

BARE SCSI DRIVES

Quantum 52Mb.....£189.99
Quantum 127Mb.....£179.99
Quantum 170Mb.....£199.99
Maxtor 213Mb.....£219.99
Maxtor 245Mb.....£254.99
Maxtor 330Mb.....£309.99
Fujitsu 540Mb.....£634.99

EMULATORS

Falcon PC Speed 286 !6 Mhz.£224.99
PC Speed 8Mhz PC/XT only £54.99
8Mhz AT SPEED only £129.99
16Mhz AT SPEED only £194.99
Fitting service available and full repair service on all Atari Product!!

SCANNERS

The Power Scanner

This scanner comes with the latest version 2 sofware. With bright & sharp grey scale performance & flexible scanned image display manipulation options. Options include Clean up, embolden, resize & flip.

only £94.99

New Alpha Scan Plus

New version of this famous 400 DPI scanner. Includes Touch up and Merge-it software enabling you to alter and manipulate high resolution images. Needs 1 Mb of RAM and runs in mono only.

only £129.99

MICE & TRACKERBALLS

Alpha Data Mega Mouse

90% rating by reviewers. Our best selling mouse

only £12.99 or £14.95
for 400 Dpi version

Datalux Clear Mouse

High quality clear 2 button mouse

£19.99

Zydec Trackball

£29.99

Golden Image Trackbail

£36.99

DISK DRIVES

Zydec 3.5" Drive

1 meg external drive, high quality low noise drive. Inc PSU

only £57.99

Power 720B 3.5" Drive

This 1 meg external drive comes with Virus checker , built in Blitz turbo and boot switch for drive B. Includes PSU

only £69.99

ICD ACCELERATORS

Selectable 8/16 MHz ROM access Includes 32k static RAM

Ad Speed ST.....£139.99
Ad Speed STE.....£159.99

ROM SHARERS

Upgrade your Atari to TOS 2.06 with this easy to install add-on. Gives you the capability to switch between your old TOS and 2.06

only £64.99 inc TOS 2.06 ROM

Marpet RAM EXPANSIONS

New! XTRA-RAM+8

Upgrade your STe or Mega ST up to 12Mb using SIMMS

£84.99 unpopulated

The *Deluxe* range of RAM expansions by Marpet for the older STFM must be the best available on the Atari. Expandible to 4 Mb by the use of 1*8/9 SIMMS modules, the 512k expansion is ideal for the user who may need more RAM later on.

STFM *Deluxe* SIMMS modules

4 Mb unpopulated.....£24.99
4 Mb populated to 512k.....£34.99
4 Mb populated to 2 Mb.....£92.99
4 Mb populated to 4 Mb....£159.99

Marpet offer a seven day money back guarantee provided the product is still in as new condition. All Marpet products come with a 12 month warranty.

Prima STE RAM expansion

512K.....£9.99
2 Mb.....£67.99
4 Mb.....£134.99

Prima STE RAM products comes with a full 2 year guarantee

ACCESSORIES

The Zy-Fi Stereo System

This is a powerful speaker system with built in stereo amplifier. It will plug into an Atari STE, Commodore Amiga or Acorn Archimedes. The speakers are optimised with reflex ported cabinets. Complete with its own power supply the Zy-Fi system can also be powered by batteries

only £36.99

THE POWER RIPPER (with Supermon s/w)

The ultimate cartridge for the Atari ST. Essential tool for programmers and game players alike. gives you the Ability to rip into any Atari program on the market

only £39.99

RAM CHIPS

1 MEG by 8/9 SIMM boards as used in the Atari STE and Frontier Deluxe expansion modules

only £POA (per Mb)

FORGET ME CLOCK 2

This is a real time clock that plugs into the cartridge port. Includes a through port and software for setting time and date. All Frontier products carry a full 2 year guarantee

only £17.99

Atari ST Power Supplies

only £29.99

Atari Original

Internal Drives.£39.99!

Atari Control Centre

save space with the premier control centre

only £36.99

Mouse/joystick switcher

put joystick and mouse into one port

only £13.99 (manual switching version)
or £19.99 (auto switching version)

Monitor Switcher Box

switches between mono & colour monitors, such as SM144 & 8833 MK2

only £17.99

Video Scart Switch.....£19.99
Joystick & Mouse extension leads.....£4.99
Mouse Mats (high quality).....£3.99
40 Cap lockable disk box.....£4.99
100 Cap lockable disk box.....£6.99
90 Cap Stackable Banx Box.....£8.99
150 Cap Stackable Posso Box.....£18.99
*add £3.00 delivery if purchasing just one Posso or Banx box. STD delivery when purchased with other product or when buying 2 or more.
ATARI 520 Dust cover.....£3.99
Printer covers.....from £4.99
14" Monitor Dust cover.....£6.99
12" Monitor covers.....£5.99
ST To Scart cables.....£9.99
STD 1.8 Metre printer lead.....£4.99
Modem & Null Modem cables.....£9.99
2 WAY Parallel port sharer.....£19.99

ATARI SPARES

STFM/STE Power Supplies.....£29.99
Key Boards.....£49.99
Internal Disk Drives.....£39.99
STe Motherboards.....£49.99
STFM Motherboards.....£49.99
STe or STFM Cases.....£24.99
DMA chip.....£POA
MMU chip.....£POA
Video Shifter chip.....£POA

DISKS

All disks are 100% error free guaranteed
New High density 3.5 inch bulk and branded.
Please phone for best prices!

QTY	3.5" DD/DS Bulk	OR	3.5" DD/DS BRANDED
10	£4.99		£6.99
30	£14.99		£17.99
50	£21.99		£28.99
100	£39.99		£54.99
200	£73.99		£99.99
500	£169.99		£POA
1000	£339.99		£POA

Branded disks come complete with labels
Disk Labels....500...now only £6.99
Disk Labels..1000....now only £9.99

SOFTWARE

BUSINESS

Home Accounts 2.....£37.99
Home Office Pack by Microdeal.£35.99
LDW Power 1 Spreadsheet.....£24.99
Prodata Database.....£59.99
SBA Cash.....£69.99
System 3 Accounts.....£39.99
Timeworks Data Manager Pro.....£35.99

MUSIC/SOUND

Concerto.....£29.99
E-Magic Notator Alpha.....£204.99
E-Magic Logic.....£459.99
E-Magic SL.....£299.99
Musicom By Compo.....£43.99
Play Back.....£24.99
Prodigy Sequencer.....£49.99
Quartet Sequencer.....£47.99
Replay Pro Digitiser.....£109.99
Replay 8 Digitiser.....£66.99
Replay 16 Digitiser.....£119.99
Steinberg Pro 24 version 3 .....£99.99
Sequencer One.....£39.99
Sequencer One Plus.....£119.99
Stereo Master.....£29.99

PROGRAMMING

ST Basic.....£5.99

UTILITIES

DIAMOND BACK 2

The ultimate backup utility for the Atari by HiSoft . Essential for users of hard drives. Recently reviewed in ST Format (August) & awarded GOLD status

only £34.99

Outside virtual memory mgt up to 512Mb.....£74.99
Inprint.....£14.99
ST Straight Fax.....£34.99
Neodesk 3 Desktop.....£34.99
Multi Print.....£9.49

VIDEO AND GRAPHICS

Arabesque Pro.....£119.99
Degas Elite.....£24.99
Flexi Dump Plus.....£31.99
Photo Studio 24 bit image processing.....£74.99
Prism Paint 2.....£114.99
Ray Start ray tracing software....£74.99
Touch Up scanner software.....£27.99
True Paint.....£33.99
Xenomorph II .....£POA

WORD PROCESSING & DTP

Protext 4.3

Fast, flexible & reliable, this is the best sub £100 WYSIWYG word processor for the ST. Wide range of printer drivers, columns & box mode & spell check as you type. With mail merge, Help, English dictionary & lightning fast operation, Protext is the one!

only £39.99

Pagestream 2.1

A powerful DTP package. This is the very latest version which includes 10 compugraphic fonts, spell checker, comprehensive text manipulation and effects and much more.

only £169.99 UK Spec.

Timeworks Publisher 2

The successor to the popular Timeworks ST this new version boasts over 40 new significant features.

now only £39.99!

First word Plus v3.2...only £45.99!
Thats Write V.2.....£109.99
Write On word publisher.....£44.99

FULL REPAIR/ UPGRADE SERVICE AVAILABLE

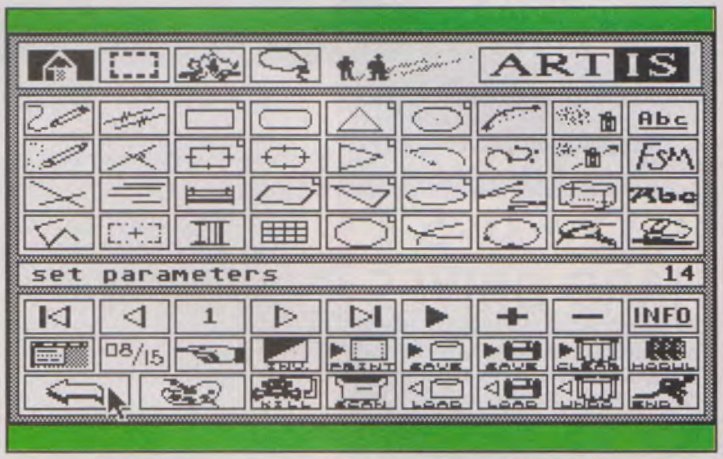
We offer a FREE quotation on your Atari or any peripheral (monitors, printers etc). A delivery tariff of just £5.00 is charged or alternatively you can visit our showroom.

Tel 0532 319444

and ask for the service department

A BLEND OF

Prism Paint caused quite a stir when it first appeared. Keith Berry finds out whether version two continues to lead the way...



The main menu. Although only in two colours, it remains clearly legible whatever the palette set-up.

From the moment the ST appeared, the software market had a range of quality picture creating programs available. *Neochrome* and *Degas Elite* offered such creative toolkits that they are still popular today.

Flair Paint and *Hyperpaint* made pictures larger than screen size by using the .IMG format, and animation using rapid display of multiple screens could be achieved with programs such as *Aegis Animator* or *Cyber Paint*. Even the ST's 16 colour restriction was broken by *Quantum Paintbox* and *Spectrum 512*.

Sadly these are no longer readily available; the only graphics package currently being marketed is HiSoft's *TruePaint*.

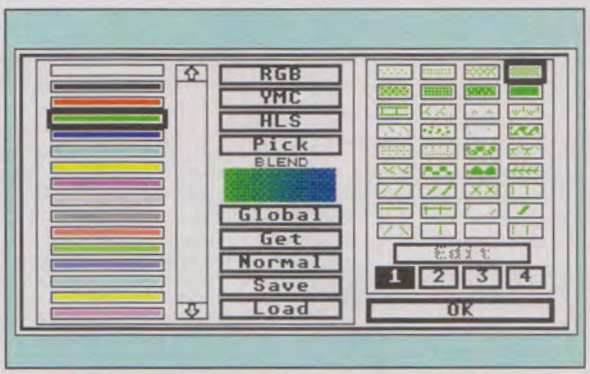
IN A FLASH OF LIGHT...

Shortly to be launched, however, is *Prism Paint 2*, aimed at both ST and Falcon owners, and at least 2Mb of RAM is needed to employ all functions. All three ST resolutions are supported as befits a program that is based on a well-featured mono drawing utility (*Artis 4.0E* from Austria) to which extensive colour functions have been added.

On loading, a dialogue box displays the maximum number of frames available for your particular system and these must be reduced to the number actually needed or there's little memory left for anything else.

There is also an option to (unwisely) disable Undo. The next view is of the main menu topped by the first of four function menus. As the mouse pointer moves over each icon, a description of its function appears in the centre window.

There is no alternative to spending several hours experimenting with these functions; the manual as supplied helps little since the function names do not match those on screen and in parts is poorly translated from German. It is also necessary to remember their locations – there are, for example, two Spraycans in the Drawing toolbox and three Airbrush icons in the Effects menu.There is a wide range of geometric figures, the icons of some having a small square showing whether filled or plain, the option being toggled with a right mouse click. Pressing the <B> or <U> key while filled shapes are being drawn toggles their borders, while four keys define Replace, OR, XOR and Inverse modes. There is also an Editor with which up to four more functions may be programmed and stored, and there are icons for completed screens to be viewed in animated fashion.



The active screen's Palette and the first of the four Pattern menus.

COLOUR AND TEXT

In the ST low resolution colour mode, the palette offers just 16 colours but supports all three main methods of working with colour: RGB (Red, Green, Blue), CMY (Cyan, Magenta, Yellow) or HLS (Hue, Luminance, Saturation). Values of each can be changed by sliders – each parameter has 125 (13 effective) steps – as can the global Contrast, Luminance and Saturation, but there is no digital display of any of the values. There are four, 36-pattern selection menus, the fourth left blank for user-defined ones. Each screen can have its own palette, which may be copied from another screen.

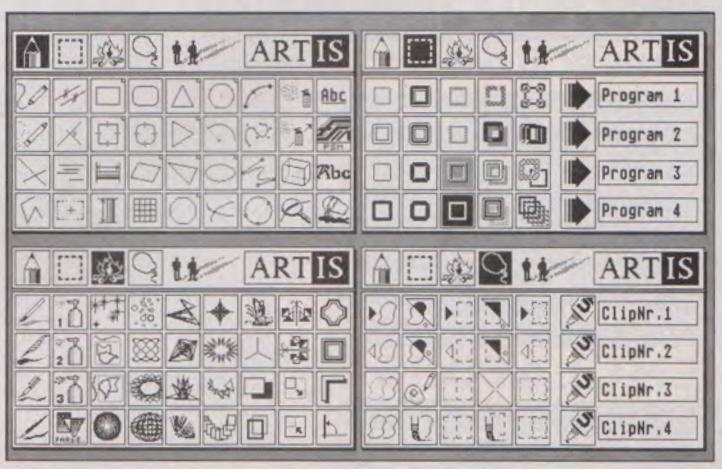
Many of the program's system and drawing function parameters can usefully be altered to suit and saved as defaults if required.

Text can be added using the system font, *SpeedoGDOS*, which I was unable to test, or Signum fonts. The latter appear rather large and require editing because of missing ascenders. The Function keys modify the size and other attributes of the system font only although there appears to be wider control over Speedo vector fonts. For printing, driver modules are supplied for the NEC P6, HP Laserjet and the Deskjet 500C, but not the 550C. The Laserjet/Deskjet driver was tested with a 550C and the result was an unsatisfactory series of stripes...

SCREEN WORK

Among its remarkable features is its ability to increase the size of a workscreen without having to predefine it or reboot. This works not only when loading large images, but is also selectable from the Parameters menu. Unfortunately there is no way to see such a picture in its entirety as viewing is limited to screen-sized sections. Potentially usefully too, is that a scanned .IMG or even a mono Degas (but not TINY) file may be loaded without prior conversion for colouring and re-saving as a colour X-IMG file.

Throughout many hours of working it has not bombed or locked up once in normal use but there is evidence of laxity in error trapping. For instance, it is possible while using the Magnifier to plot pixels over the picture's edge, causing a short period of inaccessibility while violent colour cycling ensues. When calm returns, an image of the Magnifier screen



All four toolboxes – though you won't see them at the same time!

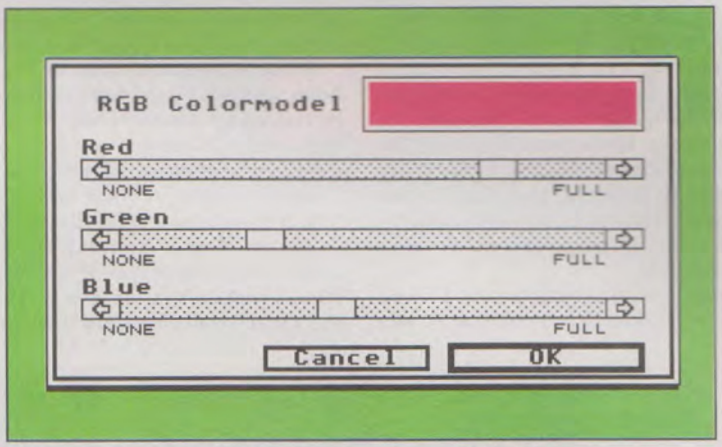
COLOUR

may be found overlying the contents of the next workscreen. Attempting to save a Palette to the default, but not existent, PALETTES folder caused an immediate crash to the Desktop.

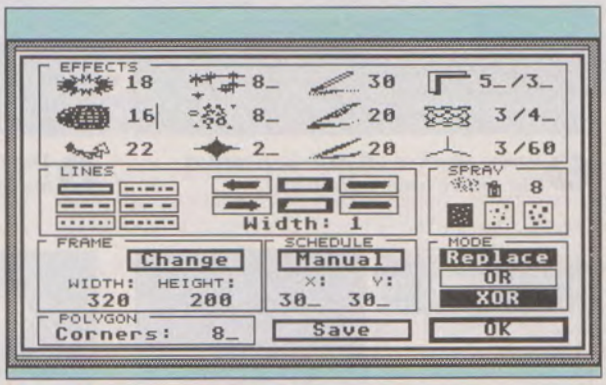
The package, supplied with an assortment of modules including GIF and IMG, can load and display (after a two minute wait) a GIF picture file for editing. Selecting the Safety Save icon causes the current screen to be saved as a file called SAFETY.IMG, and there is another icon to recall it – a useful function provided you remember to move or rename the file after each session.

There has been a steady improvement in graphics file formats over the last decade to enable much higher resolutions than the original .NEO and .PI1 formats allowed, and this package is obviously well equipped to handle them. It's a pity that in achieving this higher power the user-friendliness of some of the older graphics utilities has been lost. There is no way of transferring blocks easily, a facility that will be most sorely missed by the *Degas Elite* owner, and there is no equivalent of the latter's ability to move from screen to screen without having to return to the menu. Owing to the lack of a full-frame view facility to enable a Copy grab, the only means of transferring a picture bigger than screen size is by saving it, moving to another screen and reloading.

There is provision for on-screen help messages but its text file was missing from the review copy, and many German dialogue boxes await translation. It is also fair to say that 16/32 Systems are intending to completely rewrite the manual, an unenviable task.



The constituents of each colour can be modified in 125 steps but there are no reference numbers.



Adjusting various drawing parameters – Schedule" is for the automatic creation of a cell array.

PROS AND CONS

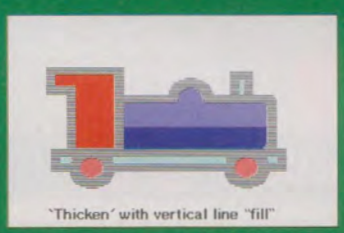
- ✓ Powerful features
- ✓ User-definable screen sizes
- ✓ Separate workscreen palettes
- ✓ Excellent in mono

- ✗ Ponderous block operations
- ✗ Inflexible Undo feature
- ✗ No overall view of a large workscreen

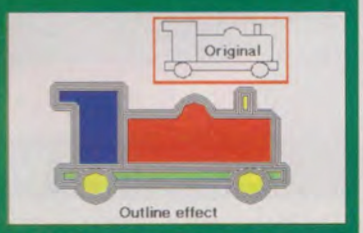
SPECIAL EFFECTS

Prism Paint 2's effect functions can modify an object almost out of recognition. These are examples of just a few of them at work on a simple line drawing.

1 *The THICK effect was used here followed by HORIZONTAL STRIPE. Because a normal fill would have leaked, Enclosed Vertical Lines (which stop when they reach a non-background colour) were used with the mouse pointer moved slowly horizontally across each area.*

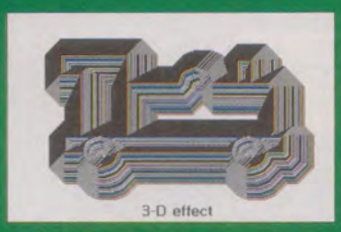

'Thicken' with vertical line "fill"

2 *Here the OUTLINE effect was selected from the Effects Menu and applied several times to the original simple line drawing of a toy locomotive, shown half-size in the inset, and then filled.*

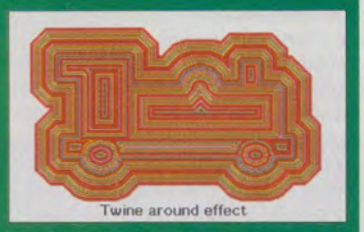


Outline effect

3 *The 3-D effect was selected for this one, used several times on the same original and then the stripe sections were carefully filled with different colours from Prism Paint 2's default palette.*


3-D effect

4 *For this pattern of continuous stripes the TWINE AROUND effect was used until the centres disappeared and then filled as before. A suitable Degas picture was loaded into another screen and its palette copied to this one.*


Twine around effect

"It's a pity that in achieving such higher power, the user-friendliness of some of the older graphics utilities has been lost."

NAME: PRISM PAINT 2
COMPANY: 16/32 SYSTEMS
CONTACT: 0634 710788
PRICE: £129.99
MIN MEMORY: 2MB
SYSTEM: ST/TT/FALCON

EASE OF USE	✪✪✪✪✪
DOCUMENTATION	✪✪✪✪✪
EFFECTIVENESS	✪✪✪✪✪
VALUE FOR MONEY	✪✪✪✪✪

OVERALL 70%

STEP BY STEP

SHIP AHOY!

An interesting *Prism Paint 2* feature is labelled on screen as Colour Blend and as "Fill with Roster Movement" in the manual, which unfortunately is of little help as to its use, and even after considerable experimentation, such as is shown in these illustrations, results remain unpredictable.

The ship was drawn using the basic drawing tools – rectangle, continuous line and horizontal lines – and then solid filled. To produce its reflection meant selecting the Block Function menu, the Copy & Paste icon, pasting the image down, selecting the Effect Functions menu, the Vertical Flip icon to invert it, then back to the Block Function menu and the Copy & Paste icon to reposition the image correctly. A somewhat ponderous operation to achieve what *Degas Elite* could do with a single keystroke!

To the reflection were applied the ROUNDED EDGES and HORIZONTAL STRIPES effects, and the remainder of the screen was solid filled between horizontal lines (step 1).

At this point with the palette screen showing the lower two fill colours blended, the BLEND function was selected and the lower left area of the screen marked off, Vertical Blend selected and a down arrow set to show the direction of the blend. Step 3 was the result, showing that the black of the ship had been incorporated into the Blend even though it was selected neither in the Palette menu nor in the marked area (step 2).

The result of Blending the centre band was that a section to the right of the ship remained unaffected (step 4) and parts of the blended area required a Copy and Paste, using the Magnifier/Pixel Editor (step 5) to tidy up afterwards.

In the final frame (step 6) the ship has sprouted masts and portholes, the sun (a solid filled circle) has been added and its reflection in the water has been represented by "Sparkles," an effects function, as is "Bubbles" some of which have been colour filled to portray the release of balloons as part of some on-board festivity!

Whereas most of *Prism Paint 2*'s functions can be tested repeatedly and then cancelled by the Undo icon on return to the Main Menu (the Undo key is ignored), upon completion of a Blend operation there is only a fraction of a second to see the result before the Main Menu reappears to obscure it. The selection of any icon now to view the picture will eliminate the Undo opportunity...



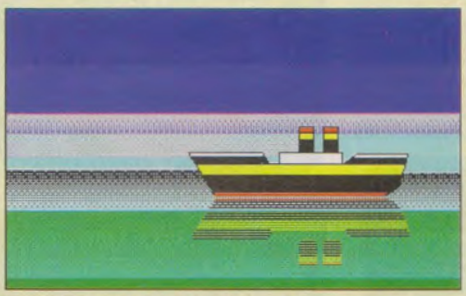
1 *The basic ship, reflected and the reflection modified by the ROUND EDGES and HORIZONTAL STRIPES effects.*



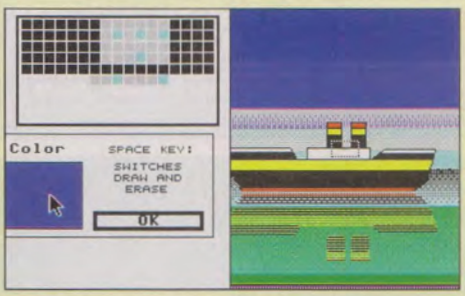
2 *Areas marked off with horizontal lines have been solid filled.*



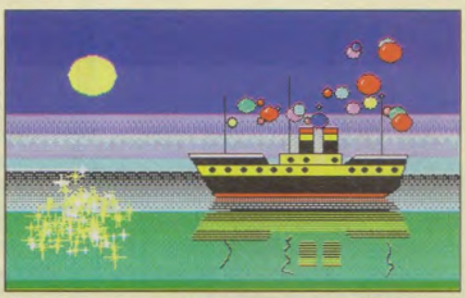
3 *The Colour Blend function applied to the lower area.*



4 *The mid-screen Blend is incomplete and sections from the left side will have to be copied to the right.*



5 *Extraneous detail is removed by use of the Magnifier.*



6 *The "Sparkle" effect is added for the sun's reflection and filled "Bubbles" depict balloons.*

FLYING HIGH WITH THE FALCON

Prism Paint 2 is clearly intended for the higher end machines as its performance on the Falcon shows. All of the drawing tools become that little bit more responsive and the program feels very fluid despite the extra colours. Any screen mode from mono to mighty true-colour is accommodated with ease and even the control panel is tidied up to take advantage of the extra space.

In short, it becomes a much more classy operation altogether – colour blends are more effective, Speedo fonts are better defined and finished artwork benefits enormously from the extra splash of colour. *NVDI* adds its usual air of enthusiasm to the proceedings (if you have it) and thanks to the built-in GEMView modules, pictures are automatically dithered to suit the current resolution.

Only one small cloud hangs over *Prism Paint 2* – a truly voracious appetite for memory. It's just about possible to work in true-colour on a 4Mb machine, but if animation tickles your fancy, you'd be well advised to consider a virtual memory driver. Even so, it is probably the most innovative art package released on the Falcon to date.



More colours and a better response is the result of running Prism Paint 2 on a Falcon.



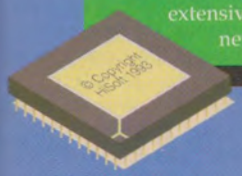
Some Good News for Atari Programmers

There is plenty of good tidings for the Atari programming community this month. Two new books that contain a wealth of up-to-date information and two new versions of our popular languages. Together, these developments breathe new life and hope into Atari 680x0 computers.

Modern Atari System Software

New

This invaluable book contains all the latest details of Atari's newest system software together with the bindings for Lattice C 5.60, HiSoft BASIC 2.10 and Devpac 3.10 - essential for all serious programmers who want to use these packages. Majoring on the Falcon030, *Modern Atari System Software* contains extensive discussion on programming this exciting new machine ... 256 pages, price £19.95.



The Atari Compendium

Finally! This book, from Scott Sanders, provides the most comprehensive collection of information designed for every level of Atari programmer. It covers all Atari 680x0 computers from the 520ST up to the Falcon030 and includes a detailed reference for every function present in TOS 1.0 up to TOS 4, and beyond. This is the book we've all been waiting for ... 840 pages, price £39.95.



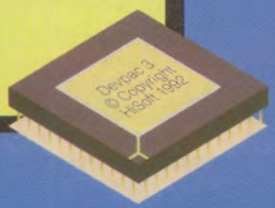
Devpac 3.10

ATARI FALCON 030™ ENHANCED

We are pleased to announce the immediate availability of Devpac 3.10, our latest release of the acclaimed assembler/debugger package. Version 3.10 contains many improvements and enhancements as well as detailed support for the new Falcon030. Upgrades start from only £3 for our Gold Support customers, RRP remains at £79.95.

- Extra include files for SpeedoGDOS™, MultiTOS™ and MiNT™
- Improved debugging and editor facilities including support for all Falcon resolutions
- Editor now works in low-res on all versions of TOS!
- Falcon030 AES and XBIOS support (full details given in *Modern Atari System Software*)
- Falcon030-specific libraries for the DSP/Video/Audio hardware
- Supplied with handy reference card giving editor and debugger keyboard shortcuts

New



BASIC 2.10

ATARI FALCON 030™ ENHANCED

Ideal for both the beginner and the seasoned programmer, HiSoft BASIC 2 combines ease-of-use with exceptional power and flexibility - the only BASIC that is still developed and supported in the UK. 2.10 contains many new features detailed in an extra 32-page manual - upgrades start from £19.95, RRP is £99.95.

- Extra include files for SpeedoGDOS™, MultiTOS™ and MiNT™
- Improved debugging and editor facilities including support for all Falcon resolutions
- Major GEM Toolbox improvements incl dialogs with keyboard shortcuts and pop-ups
- Named compiler options for simplicity
- MultiTOS™ friendly dynamic heap option
- Falcon030 AES and DSP/Audio/Video support (full details given in *Modern Atari System Software*)

New



HiSoft
High Quality Software

VISA Access

For more information on any of our products which include the AVR music/video titles (e.g. Replay16, VideoMaster) and Microdeal software, please call HiSoft on +44 (0) 525 718181, or fax us on +44 (0) 525 713716 or write to us at: The Old School, Greenfield, Bedford MK45 5DE UK.

All HiSoft products should be available from your local Atari computer shop. In case of difficulty, you can order directly from HiSoft using your credit/debit card over the phone or by sending us a cheque/postal order. Overseas customers please call, write or fax for information.

Following on from our exclusive preview a couple of months ago, Ofir Gal puts the release version of Geneva through its paces...

TASK MASTER!

ATARI ST REVIEW ESSENTIAL BUY

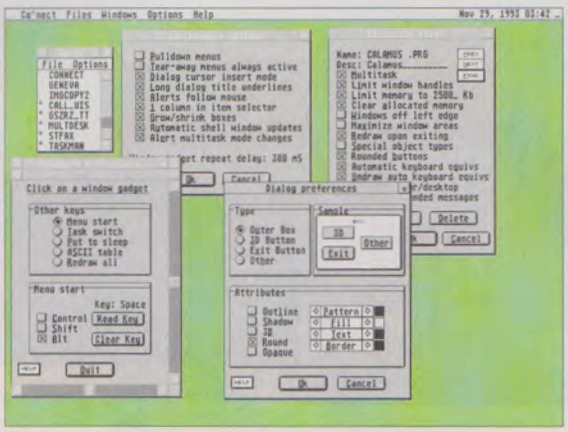
Have you ever been frustrated at having to quit one program before you could load another, or waiting for *1st Word Plus* to print before continuing to work? Then read on...

Geneva, the new multi-tasking system from Gribnif, creators of the ever-popular *NeoDesk*, has arrived!

TWO INTO ONE...

Multi-tasking is a buzz word used to describe a complex process where several programs can co-exist, sharing the computer's memory and processor. What this means to you and me is that it is possible to run more than one program at the same time. Depending on their nature, it may also be possible for one program to perform a task in the background while one or more other programs are active.

Under a multi-tasking system, you can, for example, download a file via a modem while printing another file from a DTP program and even playing a game at the same time. You have probably heard about *MultiTOS*, Atari's own multi-tasking system, which has been around since the beginning of 1993. While *MultiTOS* is without doubt a powerful system, it does suffer from one fundamental flaw – it is rather slow. Most of us own a standard ST where the loss of speed is most noticeable. Another issue facing *MultiTOS* users is compatibility – many programs simply refuse to run, exhibiting various problems. While this situation is improving, *Geneva* attempts to address both issues, claiming to be almost as fast as good ol' TOS and highly compatible at the same time.



With Geneva you can configure almost every aspect of the interface. Button appearance, pull down or drop down menus and keyboard shortcuts are just some of the many options.

STARTING OUT

Geneva's installation program couldn't be easier. Just enter your details and destination folder; *Geneva* automatically installs. A hard drive is not essential but highly recommended.

The next stage is to reorder the files in your Auto folder, a full explanation of which is found in the manual. Then simply reboot and *Geneva* will be active. Since the standard desktop does not support multi-tasking, *Geneva* requires *NeoDesk* v4.00. Unfortunately, this version is not available at present and so a temporary version (v3.04) is available.

Strange as it may seem at first, a desktop is not essential with *Geneva*. There are several ways to run a program and the extended built-in file selector can be used to copy, move and delete files at any time.

NUTS 'N' BOLTS

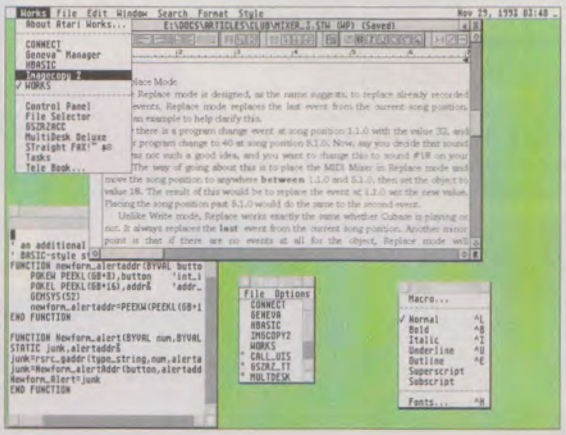
Geneva works by replacing the Atari AES, the part of the operating system that handles menus, windows and dialogue boxes. When using *Geneva* without a desktop, you can run any application using the *Task Manager*, a small desk accessory that can load programs as well as customise the way each program is handled by *Geneva*.

The *Task Manager* has two drop-down menus. Clicking on the **File** menu displays the *Geneva* item selector where you can select the program to run. This then loads in the usual manner and is registered under the **Desk** menu, just like a desk accessory. It is then possible to run more applications in the same way.

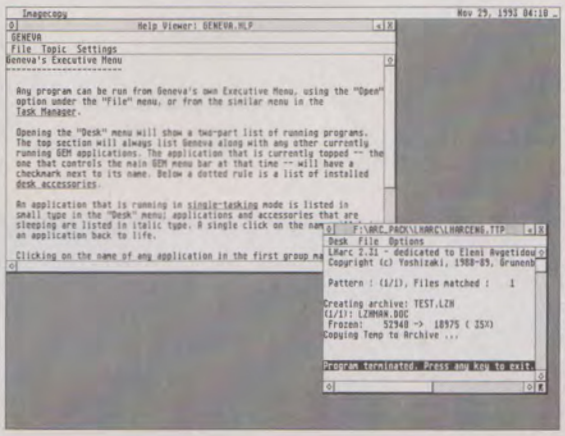
In addition, the *Task Manager* can be used to customise each application so that it runs happily under *Geneva*. Many programs, such as *1st Word Plus* and *Calamus* normally hog all available memory when loaded which can be a problem under a multi-tasking system as there is no memory left for other programs. Limiting the memory for each application is just one of the many options available from the *Task Manager*.

The six desk accessory limit no longer exists and accessories can be run from the *Task Manager*. In fact, the distinction between standard programs and desk accessories becomes somewhat unnecessary as both can be started and terminated at any time.

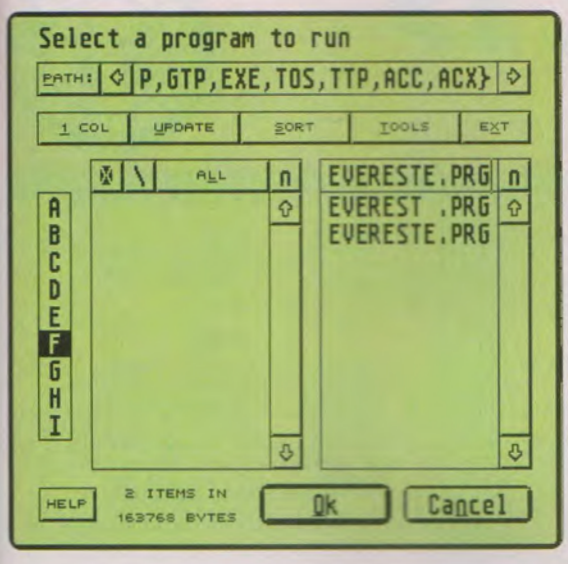
Switching between one program and another is achieved by simply selecting the appropriate menu item, just as you would with desk accessories. In addition, *Geneva* lets you assign a keyboard shortcut to start or switch to a program. By



A number of programs can be active at the same time. Each program can be called by clicking on one of its windows or by selecting it from the Desk menu.



Geneva features a built-in help facility using hypertext links. Any underlined item can be double clicked and this automatically displays help text on that item.



The built-in file selector can be used to copy, move and delete files. It incorporates various options such as user-defined paths and multiple masks as found in the best replacement file selectors.

GENEVA V MULTITOS

Geneva and *MultiTOS* may appear to be similar but they are fundamentally different. *Geneva* is a cooperative multi-tasking system – applications all get an equal share of processor time. Under a cooperative system, it is very easy for one program to grab the processor and not allow other applications to work. A file archiver like *LHARC*, for example, takes over the system and prevents you from doing anything else while it is running. *MultiTOS* works at a much lower level. Being a pre-emptive system, it allows you to determine how much processor time each program gets and attempts to automate priorities, preventing "naughty" programs from hogging the system. Both Windows (PC) and System 7 (Macintosh) are cooperative systems like *Geneva*.

MultiTOS also features memory protection on the TT and Falcon. This prevents a program crash from taking all other programs down. Under *Geneva*, a crash normally means that all active programs freeze, requiring a reset. On the whole, *MultiTOS* is far more powerful, allowing alternative file systems, inter-process communication and an extensive set of system calls, most of which are yet to be utilised in everyday applications. This extra power comes at a price – speed. *Geneva* is much more user friendly. While *MultiTOS* lacks the most basic options such as limiting the memory an application can grab, *Geneva* features a whole host of user options, allowing you to customise the setup as you wish.

Work is currently taking place to allow *Geneva* to make use of *MiNT*, the heart of *MultiTOS*, which will add program prioritisation and memory protection along with many other features. Using *Geneva* with *MiNT* will slow it down...

resizing each application's windows it is possible to have more than one program on screen and clicking on any window automatically brings that program to the foreground.

PRACTICAL POINTS

The most surprising thing about *Geneva* is that it requires less than 200Kb of RAM, making it possible to run on a 1040ST. Even so, 2Mb or more are recommended if you wish to run more than one program at a time.

The authors have certainly put a lot of thought into *Geneva* and it shows. The various options and enhancements such as keyboard shortcuts for almost every function make it a joy to use. *Geneva* has its shortcomings – unlike *MultiTOS*, it does not support inter-program communication or memory protection. It also generates far too many redraws – windows redraw for no apparent reason and although this does not cause any problems, it does slow the system down.

The manual is excellent, although a little technical in nature. It covers all the various program flags and options, helping you to get the best out of the system. About a third of the manual is dedicated to programming with *Geneva* and while of interest only to a minority, this is a welcome addition since it will allow many programmers to take advantage of *Geneva*'s internal features.

Thanks to the various configuration options, many programs that refuse to work under *MultiTOS* run quite happily under *Geneva*. These include *Tempus* and *Protext*; other window-based applications also work without much difficulty. *Geneva* claims to be faster than *MultiTOS* and indeed it is very fast, enough so to be used on a standard ST...

✓ A fast and compatible multi-tasking system
✓ Enhanced GEM interface

PROS AND CONS

× No memory protection
× Limited background processing

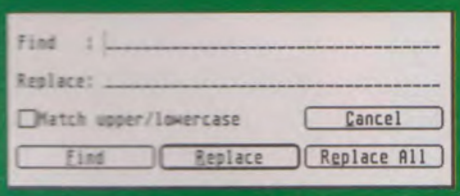
EXTRA FEATURES

The number of extra features is amazing, especially considering the small amount of memory *Geneva* consumes. All features are available in almost every program when run from *Geneva* or the *Task Manager*.

For a start there are keyboard equivalents galore. Even programs that do not support keyboard shortcuts are assigned them automatically. Each button in a dialogue box has an <Alt> plus key equivalent that is indicated with an underline character in the button. Editable text fields in dialogue boxes are greatly enhanced. The cursor can be moved freely with the mouse and holding <Control> down while pressing the arrow keys moves the cursor one word at a time. Holding <Shift> moves the cursor to the beginning or end of the text.

Windows can be accessed even if they are not active by using the right mouse button. An additional window gadget lets you place the window at the bottom of the pile with a single click. Any menu can be "torn off" and placed anywhere for easy access. Each menu entry can be assigned a keyboard shortcut if it doesn't already have one and any window gadget, such as the scroll bars, can also be assigned a shortcut. Best of all, your entire set-up can be saved!

A program can be temporarily removed from the screen by putting it to sleep – select the application menu item while holding <Shift> and it is immediately removed. The program can be "woken up" by selecting its menu entry from the Desk menu. This feature is automatically engaged by *Geneva* when loading programs that cannot multi-task; all other programs are put to sleep until you quit.





"At last – ST owners can reap the benefits of multi-tasking without paying a speed penalty."

NAME: GENEVA v1. 01
COMPANY: COMPO
CONTACT: 0480 891819
PRICE: £59.95
SYSTEM: ANY ATARI
MIN MEMORY: 1MB

EASE OF USE	★★★★★
DOCUMENTATION	★★★★★
EFFECTIVENESS	★★★★½
VALUE FOR MONEY	★★★★★

OVERALL 92%

L.A.P.D

QUALITY P.D. FOR ATARI COMPUTERS (ST/STE/FALCON)

★ PD disks: £1.50 each ★

★ HD Falcon disks £1.75 ★
★ BUDGET RANGE PD DISKS ONLY £1.00 ★
★ Licenceware disks from £2.50 to £5.00 ★
★ Commercial Games Software from only £2.99 ★
★ Same day service, quality virus free disks ★
★ PLEASE ADD 50P P&P ON ORDERS UNDER £5.00 ★
★ *Overseas customers (outside Europe) please add 50p per disk* ★

FALCON SOFTWARE

A FULL RANGE OF SOFTWARE FOR THE ATARI FALCON COMPUTER IS NOW AVAILABLE ON HD DISKS, INCLUDING:

HD.32 NETHACK: Huge fantasy role playing game, 2Mb+ (£1.75).
HD.1 POV RAYTRACE: The best raytrace program around. Unzips to 3 x HD disks. (£1.75).
HD.9 JPEG COLOUR PICTURES: True colour pictures (£1.75 per disk).
HD.21 JAPAN: Photo quality slide show of XGA pictures (2 disks/£3.50).
HD.19 HUMANS: Demo of the commercial game (2 disks/£3.50).
HD.2 UTILITIES: Includes programs to run STE/STFM programs. (£1.75).
HD.12 MAINLY MUSIC: Includes Desktracker, Pro-Tracker, Star Player, etc. (£1.75).
HD.13 MORE MUSIC: Includes Winrec, a direct to disk recording system (£1.75).

Our full range of software for the ST/STE is currently undergoing compatibility testing for the Falcon. If you are considering any title from our ST range contact us and we'll let you know if it's compatible. (Ask for our FREE Falcon catalogue)

All disks below, £1.50 unless otherwise stated
***** BUY 11 OR MORE £1.50 DISKS FOR ONLY £1.25 EACH!! *****

GAMES

ARCADE

G.342 Utopos: Two play rotate and thrust 'Grav' type combat game.
G.333 SUPER PSYCHO KART: High speed platform game to rescue piglets (1Mb S/W)
G.316 H-MEC 2: Sequel to the tremendously popular H-MEC. (1Mb STE or Falcon).
G.314 IT'S A MUG'S GAME: Fun one or two player boxing game.
G.302 REBOUND: A bat & ball game requiring determination, stamina and patience!
G.293 H-MEC: The ultimate Pac-Man? (1Mb, STE only)
G.292 CASTLE CAPERS: Superb platform arcade action across 10 screens. (1Mb).
G.285 KUBES: Falling block game with a novel twist.
G.286 ROCKFALL SPECIAL EDITION: Tunneling/diamond collecting puzzle game.
G.281 PSYCHO PIG: Platform shoot 'em up with Rambo-esque pig. (2 disks, £3). S/W.
G.279 OPERATION GARFIELD: Frantic "Operation Wolf" type shoot 'em up action. (STE).
G.268 MEGALINE: 1Mb. "Tron" light cycles game for 1-4 players. (STE only)
G.250 CYBERNETICS: Good, challenging 'Defender' type arcade game. S/W.
G.80 TETRIS & PILE UP: Two very good versions of the 'Tetris' arcade game.
G.171 HACMAN II: 1 megabyte version of Pacman. 100 new levels!
G.221 GRAV 2: Follow up to highly praised 'Orbs' type rotate and thrust arcade game.
G.110 LLAMATRON: 100 levels of fast arcade action with wicked sound FX (S/W).
G144 REVENGE OF THE MUTANT CAMELS: More fast arcade action Jeff Minter mayhem (S/W)
G.150 COLUMNS: An impressive relative of the Tetris tumbling block game. (1Mb).
G.201 BLAT!: Tetris style three in a row, falling blocks with many aded features.
G.239 BLOX: An excellent variation on the falling block, Tetris, theme.

FANTASY/ROLE PLAY

G.343 BLUDGEON: Solo fantasy adventure using the Bludgeon combat system (S/W)
G.288 DARKLYTE: 'Space Crusade' type droids wargame.
G.284 BIO-HAZARD: Two levels of brilliant Sci-fi 'Dungeonmaster/Captive' game. S/W.
G.197 DUNGEON LORD: 3 levels of 'Dungeonmaster' type adventure from the States. 1Mb.
G.262 ALIENS!: Space Marines v. Aliens strategy combat game.
G.198 OMEGA: A large and complex wilderness and dungeon exploration game. 1Mb.
G.115 MYSTIC WELL: Complete 'Dungeonmaster' style adventure game.
G.308 WALLS OF ILLUSION: The ultimate Dungeonmaster clone ... but it's in German. A knowledge of the language is a distinct advantage but not compulsory.

PUZZLE

G.341 FISTFUL OF PROGRAMS: Half a dozen assorted games from Dunces Cap Software.
G.340 ZIGGY: The latest puzzle game from Nice Bytes. (S/W)
G.323 SPOT IT: An electronic version of the Spot the Difference puzzle.
G.318 BRAIN DAMAGE (S/W): Trivia/puzzle game, 15 stages in 8 games.
G.315 SKULLS: Addictive up to date reworking of Landmines/Minefield (1Mb STE).
G.306 LOGIC PROBLEMS 11: Three more logic problems from Ben Weston.
G.310 DOMINOES: Playable demo version of a domino playing program.
G.311 JIGSAW: A computerised jigsaw puzzle. (1Mb).
G.294 ROLL-IT: Challenging German rolling-ball puzzle game. (1Mb).
G.280 COLOR CLASH: Adventure/Maze game with puzzles by Animalsoft. S/W.
G.269 QUIZMASTER: Multi-choice answer general knowledge quiz. (STE only).
G.258 GALACTIC FRUIT BOWL: Trivia Quiz meets the fruit machine (1Mb)

ADVENTURES

G.321 INVESTIGATION (2 disks/£3.00) Graphic adventure in the style of Sierra On-Line.
G.200 ANARCHY ACADEMY: 3D adventure to blow up the school!
G.140 A NIGHT ON THE TOWN: An adventure with the opportunity to meet the girl of your dreams and ... well, the rest is up to you.
G.222 GRANDED AND THE QUEST ...: 3D graphic adventure by Ian Scott. Shareware 1Mb.
G.303 GRANDAD AND THE SEARCH FOR THE SANDWICHES: Sequel to 'Quest for the Vest' (1Mb 2 disks/£3.00).
G.215 BLACK DAWN: The Earth is under threat (again) and it's up to you to save it.
G.99 DRAGON SLAYER: Can you, a lowly beggar, gain riches by slaying the dragon.
G.156 THE AWE CHASM: An adult adventure featuring Snatch and Crunch (over 18's only).
G.167 SUSAN: An adult adventure (over 18's only).
G.91 QUEST FOR THE HOLY GRAIL: Pythonesque madcap humour.
G.163 ALICE: Take a trip through the looking glass.
G.202 UNNKULIAN UNDERWORLD: Highly rated large scale text fantasy adventure.

STRATEGY & OTHERS

G.344 CHESS-MATE: A Chess/Draughts playing program cum analysis tool S/W.
G.332 CAESER: Strategy game set around the Mediterranean in 200BC.
G.330 GNU CHESS: French chess playing program for all levels.
G.329 PEGASUS: A massive space strategy game. Seek out and colonise planets. (1Mb 2 disks/£3.00).
G.131 STAR TREK – THE GAME: Defeat the Klingon threat to the galaxy. (1Mb).
G.299 TERRAMOON: Shareware demo version of a detailed 'STAR TREK' type game.
G.287 THE COURSE ANGLER: Angling simulation game. (1Mb).
G.237 CHAOS: Madcap game of battling wizards by Martin Brownlow (1Mb or .5Mb).
G.324 IMPERIAL CONQUEST: Complex ancient Mediterranean game of conquest (S/W).
G.325 SOCCER MANAGEMENT: A complex simulation of soccer management (S/W).
G.290 SOFTWARE PROJECTS: Manage a software house in this business sim.
G.217 THE MAZE: 3D adventure game loosely based on 'The Crystal Maze'.
G.173 PENGUINS: Move your penguins around the screen 'Lemming' fashion.
G.10 VEGAS: Roulette, poker, blackjack and slots ... without the Nevada sand!
G.118 COMPANY: Business simulation that puts you at the head of a corporation.
G.124 SPECTRAL SORCERY: An excellent spelicasting game of battling wizards.
G.147 THE MANAGER: Manage a top football team through a tough season. (S/W).
G.152 TAIPAN: A trading game set around the Orient. (1Mb).

LICENCEWARE/GAMES

L.69 BIO-HAZARD: Full version of the sci-fi 'Dungeonmaster' clone (1Mb, £3.00).
L.64 STORM: Aliens meets Gauntlet for superb blasting action. A must have for all arcade fans. (£3.00).
L.72 STORM: As above – now available for 1Mb STFM's too! (£3.00).
L.66 HEARTBREAK: Highly addictive shape placing game. (£3.00).
L.67 LOGIC PROBLEMS III: Ben Weston's back with more challenging puzzles (£3.00).
L.22 GRAND PRIX MANAGER: Grand Prix management simulation. Employ drivers, mechanics, etc., test cars, then race in a full grand prix season! (2 disks/£4.00).
L.31 THE CURSE OF AZRIEL: Fantasy trading/adventure game. (2 disks/£4.00).
L.60 CONQUEST: A 'God' game in the style of 'Populous' (£3.00).
L.19 THEY SOLD A FEW: Three games from Ben Weston. Logic Problems, Wild West Shoot Out and Clan, a Kingdom game. (£2.50).
L.58 NICE BYTES #1: Gridword, a word game & Rega, a tile flipping game (£2.50).
L.50 DEMON: Fantasy game with 3D view, monsters, magic, teleports, traps, secret walls, etc. (£3.00).
L.51 POWER CUT: Arcade action from Powerfist in a subterranean complex. (£3.00).
L.52 ENERGETIX: Puzzle game from Nice Bytes. Save the nuclear reactor (£2.50).
L.48 DELUXE NOSTRAM (1Mb): Arcade platform action through 70 rooms. (£3.00).
L.45 HUNCHY 1066: Arcade action with the Hunchback, multi-levels, traps, puzzles, etc. (£3.00).
L.41 MURDER ON THE ORION EXPRESS: Murder solver game set on an interstellar cruiser. (£3.00).
L.21 DEAD OR ALIVE ...?: Large, complex and challenging text adventure. (£3.00).
L.11 Pi SQUARED: Challenging puzzle game with increasing difficulty levels (£3.00).
L.33 QUEST KNIGHT: Fantasy quest for the Rose of Questoria. (£2.50).
L.42 OUTWORLD: Take control of a space colony arcade/strategy game. (£2.50).
L.53 HOT DOG: Greyhound racing and betting game for 1 to 9 players. (£2.50).
L.38 MARIO'S QUEST: Cute platform game to rescue the princess. (£2.50).

FOOTBALL TACTICIAN 2

(1Mb) – £22.95

The ultimate football management game!

1 to 46 manager multi-user capability. 900 players accurately named with real ages, aptitudes, skills, playing positions, caps and market valuations. 88 League referees with true to life behaviour, built in intuitive team editor, intelligent behaviour of computer controlled sides, etc., etc.

If you think you could survive in the premier league or division one this program will test you to the limit!

DEMOS

D.375 BRUTAL TECHNO: Techno rap with dancing lemmings from Adrenalin.
D.371 TRAOU'N INT KET BET ...: Stunning demo by Adrenalin. (2 disks/£3.00 1Mb).
D.373 DREAMS: Dentro by Animal Mine of Holland.
D.372 REALITY IS A LIE: Good first demo from Psychonomix. (1Mb).
D.374 BURNING ILLUSION: Sequentially running demo by DNT.
D.367 EXTREME RAGE: Sinecurves, Shadowbos, etc. from Anatomica of Sweden (1Mb STE).
D.363 GROTESQUE: Psychedelic techno music demo. (1Mb, STE).
D.366 BIRDS OF PREY: Intro to the commercial game that never made it to the ST (1Mb STE).
D.360 DREAMZONE: Mega-demo from the Wild Boys (2 disks, £3.00).
D.347 COSMIC JAM: Good multi-vector demo from Imagina of Finland D/S.
D.324 CROSSBONES: STE demo (also known as RED SECTOR DEMO)
D.287 HARDCORE DANCEFLOOR: Sampled house music by The Wild Boys. D/S
D.323 SLAM - HARDCORE DANCEFLOOR II – More house music from the Wild Boys.
D.364 DIGITAL EXTAZY: Mega-demo by TTK.
D.322 MENTAL HANGOVER: Scoopex demo converted from Amiga. (STE).
D.306 TOM & JERRY: Animated cat and mouse cartoon sequence.
D.291 LIGHTNING: Mego-demo from the Pendragons.
D.236 ELECTRA: The biggest re-set demo ever.

MUSIC

S.147 OMEGA II: Collection of files for DR. T's music software.
S.4 YAMAHA PSS: Patch editor and facility to print tablature music.
S.144 EKSEQ 1: A rack, 240ppqn sequencer with many features.
S.145 OPTRONIX MUZAK: Rip and play music from other programs.
S.8 NOISETRACKER: Soundtracker .mod player with eight starter tunes.
S.141 REAL TIME MIDI ANALYSER: Indicates MIDI event occurrence.
S.73 BAD STARS SAMPLES #1: Over 80 .SPL samples for use with Noisetracker.
S.95 HiGH FIDELITY DREAMS: 8 super pieces of music from Auro.
S.87 IMAGE FACTORY DIGI-SYNTH 1: Ripped mods with 'Lemmings' menu.
S.85 LONE WOLF SAMPLES: Voice and instrument samples for the TCB Tracker.
S.70 MAD MAX CHIP MUSIC: 35 pieces of sound chip music from Mad Max.
S.7 ACCOMPANIAST: 16 Voice Henry Cosh sequencer (full instructions on disk).
S.19 ALCHIMIE JR.: Impressive Swiss multi-windows, multi-task sequencer. (1Mb).
S.13 TCB TRACKER PLAYER: Display your own picture whilst playing Tracker Mods.
S.117 RIPPED MUSIC: Over 50 pieces of interrupt driven music.
S.54 ESION SOUNDTRACKER: Player for .MOD files with ST & STE versions.

MOD FILES

S.41 AUDIO WIZARDRY #1: Apology, Imagination Flight, Outrun, Megamix, Titan.
S.56 MOD FILES: Axkold, Follow, Dreaming, JJackson, Radio & The Edge.
S.90 HAYNES MODS #1: Legend, So Hard, Madmix, Pandora, Surburban C & C (1Mb).
S.104 PRITCHETT MODS: Airwolf, Barock, Gaslight, Jacknife, Legacy, Pyrax, Retro.
S.132 SL MOD COMP #7: Benny Hill, Bruce, Humanoid, IMF, Technotronic Insp, etc.

Many, many more available, see our catalogue for details

UTILITIES

U.66 BEFORE DAWN: Animated screen saver that will use your own animations.
U.65 HARD DISK UTILS: A collection of useful programs for hard disk owners.
U.62 MENU-HACKER: Replace a picture in almost any menu/demo/game/intro.
U.60 ST TOOLS: An exhaustive collection of Atari ST utilities, including MINT.
U.20 FASTCOPY 3: Excellent disk copier for cover disks.
U.53 TERADESK (1Mb): Replacement desktop for the ST/STE. (1Mb).
U.48 PREMIER PACKERS: 13 of the best program packers, plus a de-packer. D/S.
U.42 PICTURE HUNTER: Rips picture screens from other programs.
U.44 THE DUPLICATOR: High speed copier program.
U.47 PROBE ST: Handy utility. Grabs music/graphics, disk/memory editor, etc.
U.35 PICTURE CONVERTERS: Convert any format to just about any other format.
U.34 SAGROTAN: Super virus killer to protect your disk collection.
U.52 VAULT & TURTLE: Fast hard disk back-up utilities.
U.30 GEMINI: Good alternative desktop from Germany. (1Mb).
U.57 ALICE: A GEM based text editor.

ART & GRAPHICS

A.84 GEMVIEW: Load, view, convert just about any picture format (1Mb).
A.79 FRACTAL ENGINE 2.1: Multi-functional fractal image generator.
L.16 ARTIST FREEHAND: Excellent art package, multiple screens. (£2.50).
A.52 ROYAL PAINT: Finnish art package with all the usual features.
A.46 ELECTRIC IMAGE ART PACK: Drawing/painting program with full manual on disk.
A.78 MINI-PICS: Reduce images up to 64 to a screen! Ideal for cataloguing.
A.45 CRACK ART: Demo version of the excellent German art program.
A.19 PRINTMASTER PLUS: Loads of art work for DTP (2 disks/£3.00).
A.36 KOZMIC 4: Latest version of stunning psychedelic pattern creator.
A.37 PAD V2.4: Comprehensive mono art program with English documents.
A.75 POLYFILM by Martin Brownlow. Make films from multiple 3D polygon objects.
A.70 COMIC BOOK HEROES: 22 Neo pictures of your favourite superheroes.
A.62 ART OF DUNGEONS & DRAGONS: Superb collection of pics from Dragonlance. D/S
A.1 ANI ST: Commercial quality animation program (once cost £60.00 to buy!)
A.30 FULL SCREEN: Display your pictures in stunning fullscreen format! 1Mb. D/S.
A.44 FANTASY SLIDESHOW: Spectrum 512 pictures on fantasy theme (over 16's only).
A.47 PICTURE CONCEPT: Do weird and wonderful things with your pictures.
A.64 ATARI IMAGE MAKER: Experiment with digital image processing.
L.26, L.27, L.28 TYPEWRITE CLIP ART: 4 disk sets of quality clip art in IMG format. £10.00 per set with a free printed catalogue of the art work on the disks included.

PROGRAMMING

P.44 GFA BASIC V.2: Full version of popular language with extensive tutorial. (N.B: this disk is not P.D. – L.A.P.D. have permission to distribute it).
L.68 SPRITE WORKS: New commands for games writers using GFA V3+ (2 disks/£7.00)
M.107 RAMWORLD 2: Three dimensional object creator and viewer program.
P.37 HEAT'N'SERVE SOZOBON: A friendlier sort of Sozobon.
DSP.1 SOZORON C: A complete C compiler with documentation.
P.24 MENU-MAKER: A French program that allows you to make your own menus with music, sprite and scrolling message. Excellent.
P.35 JC MEGA MENU: Menu maker with smart fonts, music, program selector, etc.
P.33 ZX SPECTRUM EMULATOR: Emulate the old Speccy on your ST/STE. (1mb)
P.17 68000 PROGRAMMING COURSE: 10 'How to do it' document files.

RECOGNISED WORLDWIDE FOR SERVICE,

L.A.P.D., PO Box 2, Heanor, Derbys, DE75 7YP

Tel/Fax: 0773 605010/761944

Voice and Fax on both numbers

P.19 GFA EXPERT: Massive text file and help routines for GFA-Basic 3.0. D/S.
P.18 STOS TUTORIAL: Helps make clear some of the STOS commands. Needs STOS.
S.65 XBIOS MUSIC KIT: Include superb music in your own programs.
P.16 C ADVENTURE TOOL KIT: Write professional quality adventures in C.
P.41 STOS ADVENTURE CREATOR: Create your own text adventures with ease.
L.46 STOS GRAPHIC ADVENTURE CRATOR: Create your own point & click adventures with ease. (£3.00)

SOURCE CODE

P.36 UNT SOURCE #1: Code from the Wild Boys. UNT, Pixel Twins, etc.
L.23 GRAV 2 SOURCE: All the code for the top rated ST game. (£5.00)
L.24 CHAOS SOURCE CODE: All the code for the top rated ST game (£5.00).
L.47 HUNCHY: Full source for the 'Hunchback' game on disk L.45. (£3.00)

MISCELLANEOUS

M.155 ROUTE FINDER: Route finding program for England, Wales and Scotland.
M.19 AIR WARRIOR: Flight sim with World War II aircraft.
M.161 THE GARDENER: A special database for gardening enthusiasts.
L.17 ADDRESS BOOK: Neat and easy to use database for names and addresses. (£2.50).
L.18 CIRCUIT: Easy to use electrical circuit diagram producing program. (£2.50).
M.154 RUNES: Mystical interpretation of the stones.
M.143 PONDS & WATERGARDENS: An 'how-to-do-it' instruction disk.
M.150 TIP TOP HORSE: A working demo of a horse race prediction program.
M.82 ROLE PLAY CREATOR: Create characters for 'Traveller' and 'AD&D'
M.136 DUNGEON DESIGNER: Design dungeon floor plans for AD&D and similar games.
M.142 ZONK. Psychodelic pattern creator from Dave Henniker. (1Mb)
M.93 STITCH MATRIX: Pattern making program for knitting machines.
M.135 CROSSWORD CREATOR: Design your own puzzles.
M.111 NORTHERN & EQUATORIAL STAR ATLAS: Superb serious astronomy program S/W.
M.77 THE BIBLE: King James authorised version. 4 D/S disks/£6.00
M.76 FORM-FINDER: Proven horse race analysis and prediction program.
M.81 NEWSDISK: Construct your own newsletters and magazine disks.
M.103 ULTIMATE CHEAT GUIDE: 320+ game cheats, plus hidden screens on 20 demos!
M.100 GERMAN TRANSLATORS: Three programs to translate German text to English.
M.98 FILOFACT: Electronic filofax - diary, calendar, alarms, addresses, etc.
M.26 GENEALOGY: 2 programs for the family historians to trace their forebears.
M.108 CALENDAR: A calendar program that allows you to attach events to days.
L.17: ADDRESS BOOK: Neat database for storing, sorting, etc. (£2.50).
M.5 YOUR SECOND ATARI ST MANUAL: Text files about your ST.
M.17 WORD PUZZLE: Stuck with word games? Then this disk may help.
M.30 EXTRA WORD LIST: 70,000 extra words to use with disk M17.
M.40 STICKER III: An excellent label making program.
M.62 LEAGUE TABLE: Maintains league tables for soccer and similar sports.
M.72 ASSISTANT CHEF #1: 42 mouth watering recipes.
M.73 ASSISTANT CHEF #2: Another 125 tasty recipes (1Mb).
M.117 TRIP-A-TRON: A light synthesiser by Jeff Minter.
M.14 PICTURES FROM SPACE: Photographs of the earth as seen from satellites.
M.84 ASTRO 22: Calculate position of planets, cusps and zodiac.
W.5 to W.8 CALAMUS FONTS: 20 fonts approx on each disk.

BUSINESS

M.106 ACCOUNT-ABILITY: Fully featured accounts program. 10 accounts. 2,000 transactions!
M.148 INVOICE MASTER: Invoicing system for small businesses.
M.13 OPUS 2000: A superb spreadsheet program (1Mb).
M.83 INVENTORY PRO: A stock control system.
M.116 COMPACT OFFICE MANAGER: Demo of accounting program for the small business.
U.23 DOUBLE SENTRY: Impressive accounts package for the small company. (No VAT).
U.33 FAST BASE: A powerful and flexible data-base.
M.139 BANK ACCOUNT MANAGER: Maintain up to 5 accounts for instant access.
M.74 BUSINESS LETTERS: 84 pre-written letters to ease the clerical burden.
U.6 DBASE ONE: Excellent GEM driven database. Simple to set up and use.
W.3 FIRST WORD: Word processor that set the standard for others to follow.

EDUCATIONAL

M.20 GCSE STUDY AIDS: Help with Algebra, Trigonometry and Geometry.
M.1 PLANETARIUM: Excellent, easy to use, astonomy program.
M.153 WORLD WAR II: Home front study pack for Sec. school work. (3 disks/£4.50).
M.7 HISTORY FILE: Investigate a historical murder in Scotland. (3 disks/£4.50).
M.41 GEOGRAPHY TUTOR – EUROPE: Facts and figures on European countries. S/W.
M.64 SPANISH VERB TUTOR: Helps you learn correct conjugation.
M.86 DEATH OF A PRESIDENT: Investigate the Kennedy assassination. (3 disks/£4.50).
M.96 FRANGLAIS 1 & 2: French language tutor programs.
M.114 FRANGLAIS 3 & 4: French language tutor programs.
M.101 ROMAN MYSTERY: Teaching programs on Roman times. (3 disks/£4.50).
M.102 RIP IT UP: Working demo of Highway Code tutor.
M.123 C.I.A. WORLD FACTBOOK: Facts and figures on countries. (4 disks/£5.00).
M.144 WORKOUT: A general purpose learning and revision aid.
M.151 U.S.A. HISTORY: 20th century American history. (2 disks/£3.00).

KIDS EDUCATIONAL

L.20 SUPER SPELL: Teaching games for the 4 to 9 year old. (£2.50).
L.37 SUPER FUN: More teaching games for the 4 to 9 year old. (£2.50).
G.266 WITCHES, MICE & FAIRY TALES: Games for younger users.
G.83 NOAH'S ARK: Collect the animals, two by two – addictive for adults too!
M.95 ABOUT THE HOUSE: Excellent collection of programs for young children.
M.28 KIDZ EDUCATIONAL: Alphabet, Math Test, Numerical-Go-Round & Number Maze.
M.37 KIDZ DISK #1: Colouring Book, Spell Pic, Word Pic and Flash Card.
M.42 KIDZ DISK #2: Dot to Dot, Keyboard Capers & Matching.
M.67 BODY SHOP: Graphic quiz-type human anatomy tutor.
M.94 PROFESSOR CLEVER: Maths tutor program for children aged 5 to 11. S/W.
M.104 SOLAR SYSTEM GEOGRAPHY: Effects of the sun & moon, on tides, seasons, etc.
M.105 MAGIC SPELLER: Computer speaks the word and challenges child to spell it.
M.16 KIDZ COMPILATION: Kid Graph, Grid, Music, Notes, Piano, Publisher, sketch and story ... all on one disk!
M.31 SHIPWRECK: Save the stricken mariner by answering maths questions.
M.97 COUNTING: Count the objects on the screen correctly to move the cyclist.
M.71 WOLF & 7 KIDS: A point and click first adventure for youngsters.
L.37 SUPER FUN: Excellent teaching educational progrqm for youngsters. (£2.50).
L.20 SUPER SPELL: Teaching program for 4 to 9 year olds by Lexisoft. (£2.50).
PRO.27 EARLY LEARNING MATHS 2: by Philip Rankin for 9-12 years (£2.75).

SHOESTRING EDUCATIONAL SOFTWARE

L.01 ROBOT MATHS: Maths tutor for children aged 6+ (£2.95).
L.02 MOON LETTERS: Spelling game for ages 5+ (£2.95).
L.03 PICTURE MIX: Jigsaw puzzle type game for ages 6+ (£2.95).
L.04 ROBOT WORDS: Hangman in a modern format (£2.95).
L.06 ALPHABET MIX: Jigsaw puzzle game with large pieces for youngsters (£2.95).
L.07 WORD RACE: Hangman type word guessing game with athletes. (£2.95).
L.08 ALL BLOCKED UP: Mathematical puzzles for the young. (£2.95).
L.10 DROP DOWN WORDS: Spelling/memory game for youngsters (£2.95).
L.12 MATHS FUN: Maths for children 4 to 7 years (£2.95).
L.29 MINI-JUMBLE: Word puzzle game – get higher points for longer words. (£2.95).
L.30 COMPILATION #1: ROBOT MATHS & MOON LETTERS from above on one disk. (£3.95).

COMMUNICATIONS

C.22 TEDDYTERM: A superb multi-function communications program.
C.7 VANTERM V.4: Excellent multi-function comms program.
C.13 FREEZE DRIED TERMINAL: Excellent comms prog. Includes ZMODEM facility.
C.14 ST KEEP: Room based BBS system. Requires hard drive.
C.15 KM-TERM: Comms prog that can act as a mini BBS. Includes JEKYLL prog.
C.17 QSO-BASE: Database for radio hams to store QSO information.
M.138 MORSE CODE TUTOR: Practice and perfect your skills.

BUDGIE U.K.

Full range of BUDGIE U.K. software available including the following:

BU.122 WORLD CUP: Home countries football management game (£2.75).
BU.121 SUPER SCRAMBLE: Fast action arcade shoot 'em up. (£2.75).
BU.119 FOOTBALL TACTICIAN 1: The original £19.95 version!! (£2.75).
BU.113 FOOTBALL TACTICIAN: 1st Div. football game for up to 24 users! (£2.75). (Money back offer on BU113 & BU119 if you upgrade to the full)
BU.112 GO-MOKU: Ancient Japanese board game against computer or friend. (£2.75).
BU.111 INTERNATIONAL CRICKET II: Animated 3D game. 1Mb. (£2.75).
PRO.20 VIDEO MASTER: Excellent video titling program. (£2.75)
BU.50 SPACE INVADERS: Classic arcade action by Robert Leong. (£2.75)
BU.90 MATCH IT: Possibly the most addictive game ever devised. (£2.75)
BU.89 HORSE RACING SIM: Quality sim from the sale ring to the track. (£2.75)
PRO.1 ELECTRONIC BANK STATEMENT: Computerise your accounts! (£2.75)
BU.30 QUEST FOR GALAXIA: The 'Galaxians' return to your ST. (£2.75)
BU.70 PACMAN ST: The definitive version by Robert Leong. (£2.75).
BU.17 MAKE A BREAK: Snooker based general knowledge quiz. (£2.75).
BU.22 BANDIT: An electronic slot machine with holds, nudges etc. (£2.75).
BU.9 TYCOON: Mineral exploration business game. (£2.75).
BU.53 FROM LITTLE ACORNS: A delightful adventure set in Goblin country. (£2.75).
BU.71 DARK WARS: Role play adventure with a 3D view. (£2.75).
BU.86 QUATRIS: A Tetris variant with rotating cubes. (£2.75).
BU.116 SPITTING FISH: Arcade game with educational slant. (£2.75).

POWERFIST LICENCEWARE

L.43 SNOTT 93: Save the world platform arcade game. (£3.00).
L.65 EE'S LOST HIS MARBLES: Large humorous text adventure (£3.00).
L.44 SEVEN GALAXIES: Large shoot'em up with puzzles. (£3.00).
L.45 HUNCHY 1066: Re-working of the 'Hunchback' arcade game. (£3.00).
L.47 GHALFA ONE: Arcade action on an alien planet. (£3.00).
L.48 DE LUXE NOSTAM: Arcade adventure in a Dark Tower. (£3.00).
L.51 POWERCUT: Locate and destroy arcade game. (£3.00).
L.55 LOCATION UNIVERSE 3D: 3D virtual reality adventure. (£3.00).
L.56 CASTLE CAPERS: Platform game around a haunted castle. (£3.00).
L.57 LORD RAMSEY IN THE 25TH CENTURY: Arcade action on an alien planet. (£3.00).

BUDGET PRICE DISKS - ONLY £1.00 each!

B.56 SUPER GALAXOID: Galaxians return.
B.50 STAR TREK: Save the Federation
B.45 FIGHTING SAIL: Naval battles
B.42 CYBERSNAKE: Top rated action game
B.15 ROLL'N'NUDGE: Fruit machine
B.54 CENTIPEDE: Good arcade conversion.
B.33 BLASTER: Fast 'Defender' action
B.41 MR. DICE: Falling dice puzzle.
B.21 CONCENTRATION: Kids matching game.
B.47 ROCKFALL: Boulderdash clone.
B.53 LAZER BALL: Lazer reflection puzzle game.
B.51 COLOSSAL CAVE: The original adventure
B.44 FLY ROBIN: Cute shoot 'em up
B.39 ASTEROIDS: A loving restoration
B.20 HACMAN: Pacman action
B.36 8 BALL POOL: Bar game simulation
B.34 LAPD GAME: Shoot 'em up
B.14 ROBOTZ: Superb arcade game.
B.27 FROGGY: The arcade classic
B.35 NOVA: Vertical shoot 'em up.

HEARTBREAK

One of the most compulsive and addictive games ever released by L.A.P.D.
Simple in concept, but complex in play
(Just like all the best games!)
Place tiles onto a square grid to make lines of seven tiles.
But be prepared to be frustrated by odd shaped blocks of tiles, and tiles with special properties.
Mouse controlled with sampled sound.
ONLY £3.00
(Order disk no. L.66)

PROTECT YOUR DISK COLLECTION

If a virus gets free in your disk collection it can do irreparable damage in a very short time. Don't let it happen to you. We have two programs to help you protect yourself.
PROFESSIONAL VIRUS KILLER by Mike Mee £6.95. Identifies 529 different types of virus and bootsectors and could save you a lot of heartache if it traps that virus before it breaks free.
ULTIMATE VIRUS KILLER by Richard Karsmakers £9.95. Identifies 70 virii types and over 650 other bootsectors. Repairs damaged or destroyed BIOS parameters blocks.

TEACH YOURSELF MACHINE CODE

Learn to program like the professionals with ZZ Softs book and companion disk 'INTRODUCING ATARI ST MACHINE CODE'. Be led, step by step into the secrets of programming the ST in it's native 68000 assembly language. All you need to get started right away.
ONLY £19.95.

EASY TEXT PLUS

Desk Top Publishing on a budget. An ideal introductory program to DTP that will produce professional quality results. Full printed instruction manual included.
ONLY £19.95

STE UPGRADES

2 x 256K simms boards for easy upgrading of a 520 STE to 1Mb
ONLY £9.95

AUTHORS

L.A.P.D. are always on the look-out for new material to be included in their comprehensive catalogue of P.D., shareware and licenceware titles for the ST and the Falcon. If you have produced anything that you consider worthy of release either as P.D., shareware or licenceware then get in touch to discuss it with us. We can guarantee you a worldwide exposure for your program if it makes the grade.

LICENCEWARE

L.A.P.D. proudly support the concept of Licenceware and pay top rate royalties to their authors. Disks with an 'L' prefix in our advert are Licenceware disks and as such a proportion of the price you pay is passed on directly to the author. In the last quarter we paid almost £650 to our authors. If you have produced any good software for the ST, STE or Falcon and would like to know more about Licenceware then please contact us.

HOW TO ORDER

Please list the disk number and title as a double check. You can either post your order to the address above, telephone us at either of the above numbers or with a credit card or fax your order and credit card details to either number. Always include with your order details of your computer, memory size etc.
Please make cheques and postal orders payable to L.A.P.D.
Sending cash through the post is not recommended.

FREE CATALOGUE

For a FREE copy of our latest, user friendly, catalogue disk just send a blank disk and s.s.a.e. to the address above and we'll send you one by return complete with a selection of quality PD. Alternatively send us £1.00 and we'll send you the same catalogue and free programs on one of our disks. (Please quote STR).

PRINTED CATALOGUE

Printed catalogue now available, listing hundreds of PD/Shareware/Licenceware titles. Only £1.00 including P&P or 50p if ordered with disks.
Please state if you have a Falcon.

EED AND EFFICIENCY – SIMPLY THE BEST

VISA

AMERICAN PIE

How does the Jaguar match up to the 3DO?



Greetings from the USA! I hope everyone is enjoying the festive holiday season. We just might even get some snow down here in Texas this year. I do miss having a white Christmas.

Ok, let's talk Atari! The Jaguar has taken Atari fever to a new high, along with probably bringing the computer side to an all time low. After doing my monthly interviews with some of the more popular Atari vendors throughout the USA, I am sad to say that there is very little Falcon activity happening over here. But I am pleased to report that the Falcon along with *Cubase Audio* is starting to make a splash with the music vendors. One music vendor admitted more than one potential buyer was asking if the Falcon was Windoze compatible! Hey, I thought musicians didn't do anything else but buy the machine for sequencing and sampling? (Hopefully the vendor knows about *Falcon Speed*...)

I'm happy to report that the new TT clone from Germany has made its ways to our shores. Advertised under the name of the "Medussa T40", it fills the void for a high end Atari computer. The specs are indeed impressive with a 68040 running at 64MHz and includes a maths coprocessor as standard. Suggested retail price is said to be around $2,500. Available from Lexicor (*who are distributed by 16/32 Systems in the UK*). As mentioned earlier, Jaguar mania is indeed upon us. With Atari running TV ads after programs like The Simpsons and Batman The Cartoon, (FOX Network) it is clear Atari is trying to convince the kids to ask Mom and Dad for a Jaguar instead of one of the *other* two systems. Atari is actually doing a trilogy of advertising currently with ads running on TV, radio and games magazines. Bad news is, initial reports from several vendors indicate that the first batch of Jaguars sold out very quickly and that they might not get any more until early January! This means a good chunk of December shipments could be delayed.

I actually had a chance to play with both the 3DO and Jaguar. Playing *Crash-n-Burn* on the 3DO and *Cybermorph* on the Jaguar, you clearly get the idea that the Jaguar has a more powerful engine under its hood. The Jaguar's 3D polygon graphics seemed to be running at around 20 frames a second while the 3DO graphics in *Crash-n-Burn* seemed to be a slower 15 frames per second...

Atari recently announced that several more developers have been added to the Jaguar bandwagon bringing the total up to 35 Jaguar developers! Some of the new developers announced are: Accolade, 21st Century Software, Activision, International Software, UBI Soft Inc., Microprose Ltd., Interplay Microprose Ltd. (U.S.), Millenium Interactive Ltd., Phalanx Software, Brainstorm Gremlin Graphics Ltd. and Virgin Interactive Entertainment.

According to sources, Capcom, the makers of the *Street Fighter II*, has reportedly stated that while the Jaguar hardware is indeed impressive they are going to wait and see if Atari can effectively market the machine before they start developing on it... *Street Fighter 4 – Virtual Fighter for the Jaguar?*And with that, I bid you a fond farewell until next month...

Dave Munsie has been penning American Pie for ST Review for some eight issues – yet we still don't know what he looks like. C'mon Dave – send us a photograph...

TOP MARK

A brand new column looks at the German scene...

A lot of things have changed in the German market recently. For instance, Atari has reached its minimum number of employees here so far – four people and a student!

Due to the reorganisation in Europe, German dealers now get their computers delivered either from the Netherlands or via bigger dealers, called "Atari Competence Centers". Is competence derived from "to compete"?

Falcon's are selling quite well now – slowly, but at least increasing steadily. The last push came from Atari who dropped the price to 1998DM (less than £800) for a 4Mb Falcon with an 80Mb hard drive.

Since many people bought their STs between 1986 and 1988 it seems that more and more people are now thinking about the Falcon after a period of five to seven years. Since Germany has always been a country ruled by Atari SM124 mono monitors, prospective owners like the possibility of using their old SM124 monitors – it is still the best for your eyes.

Which programs are Germans using on the Falcon? One item sold with every Falcon leaving a shop is ScreenBlaster from OverScan. By the way, the software part for ScreenBlaster was programmed by Behne & Behne, famous for *NVDI* which is also sold with most Falcons.

MUSICOM 2 is now shipping, the latest version of the DSP-effect and hard disk recording program. Jingle function, cutting features, effect mixing, adjustable graphics analyser and many more functions make it an interesting product. An optional digital interface box is capable of connecting the Falcon directly via fibre-optic or coaxial cable to a CD player or DAT recorder...



perfect quality under full control by the computer!

Steinberg is still not shipping the digital interface for *Cubase Audio* and technical problems with the clock crystal has delayed release of the product until now (*full review on page 18... Ed*).

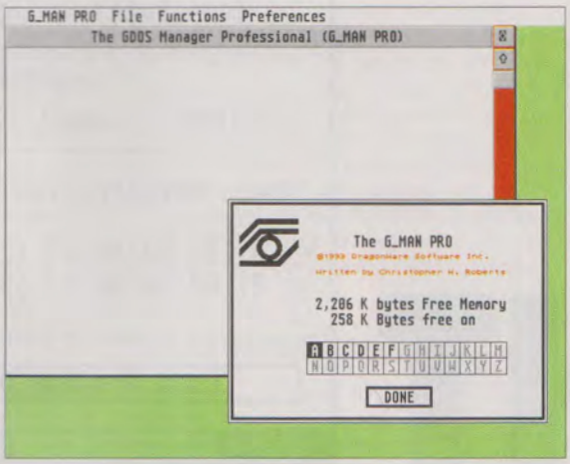
Another product using the DSP and becoming well known is *Mjuzzac*, a real-time sample player and song editor that can handle six to eight tracks with one sample each – guitars, barking dogs or phone rings or whatever else you want. Notes can be entered and played directly from the keyboard. Best of all, it's shareware...

An interesting aspect among German developers is the formation of new companies. Former 3K-Computerbild people have formed Digital Arts while some of DMC's people are also starting up their own company. So the further development of interesting products seems to be guaranteed. More rumours, an overview of the German Atari BBS scene and a look at some classic German software next issue.

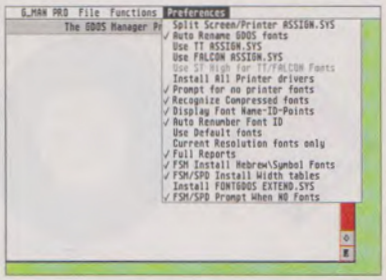
Manfred Bäcker is 26 years old and works in a computer shop in Cologne. He's been programming Atari computers since 1985 for his private needs and is active on the various bulletin boards in Germany.

NEW MANAGEMENT

Steve Pedler investigates a program that really takes the heat out of GDOS...



The G_MAN PRO main screen.



G_MAN PRO's Preferences menu.

GDOS is the extension to TOS that allows you to use multiple fonts in documents and output your work to a variety of printers and other devices. Unfortunately it is probably also the single most common cause of problems and frustration when using an ST!

Many problems with GDOS can be traced back to the *ASSIGN.SYS* file. This is a deceptively simple text file that tells GDOS which fonts and printer drivers to load and where they are found, but an error in this file can cause GDOS to work incorrectly or not at all. *G_MAN PRO* by DragonWare is intended to take the pain out of writing such files, and provides some other facilities to make managing your fonts easier.

INSTALL AND GO

After using the supplied registration program, *G_MAN PRO* can simply be copied to a floppy or hard disk.

G_MAN PRO expects all font filenames to stick rigidly with the Atari-defined format, potentially a real problem as many font files don't use this convention. Anyone who has used the excellent *Fontkit Plus* to edit fonts will probably have adopted the convention this uses, which *G_MAN PRO* doesn't like. If you use this program, you will have to rename all your font files to follow Atari guidelines. While *G_MAN PRO* offers a function to carry this out automatically, this doesn't work very well. For example, it will rename a file named *H2BULL10.FNT* to *H2BU1010.FNT*! However, the Group File Rename function lets you specify exactly how font families are to be renamed, so you don't have to rename them all manually. *G_MAN PRO* will also allow you to disable or enable complete font families by changing the file extension from .FNT to FNX which works with the older bitmap fonts but not Speedo versions.

The main function of *G_MAN PRO* is to write *ASSIGN.SYS* files, which it does very well. You first enable or disable the fonts you wish to use with the font family Enable/Disable function. The program then constructs the *ASSIGN.SYS*, prompting for printer drivers to be included. There is another slight problem here in that fonts are assigned to printer drivers depending on the font type so if you include the driver HP300.SYS for the HP Laserjet, *G_MAN PRO* automatically includes all fonts of type "LS".

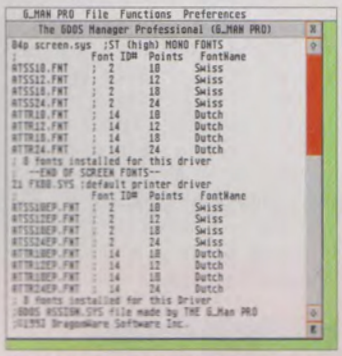
The program recognises 12 named printer drivers. If you have one it doesn't know about, you must rename the driver as PS.SYS, and then set the type of all fonts to be loaded with this driver as "PS". This is fine if you only have one "unknown" driver, but if you want to include a second one it can't be done...

Once the *ASSIGN.SYS* is written, it can be displayed on the screen for checking. If you are using the newer *FontGDOS*, *G_MAN PRO* can also write the additional *EXTEND.SYS* file required although the file it creates is not suitable for use with *SpeedoGDOS*.

G_MAN PRO has an impressive list of options. Some of these are quite useful, such as allowing you to make *ASSIGN.SYS* files that only include printer or screen fonts, rather than both. This can save memory, especially if used with the GDOS clone *G+Plus*, which allows different *ASSIGN.SYS* files to be loaded on the fly.

VERDICT

This program certainly takes the pain out of constructing *ASSIGN.SYS* files, despite the slight problems encountered in use. However, the new *SpeedoGDOS*, which uses scalable outline fonts and is a vast improvement on the original GDOS, comes with two utilities that do the same job as *G_MAN PRO*. If you are using GDOS, then *G_MAN PRO* is worth considering provided that you don't mind renaming all your fonts to follow the Atari convention. Otherwise, take a close look at *SpeedoGDOS* instead...



An ASSIGN.SYS file displayed on-screen.

ATARI FONT NAMING CONVENTION

The 8 characters of the file name are used as follows:

Position	Use	Example
1, 2	Manufacturer's code	AT = Atari
3, 4	Font family	TR = Times Roman
5, 6	Point size	08, 10
7, 8	Font type	LS = 300dpi laser printer font

The file extension is always .FNT. So, a font named ATTR14EP.FNT would be a 14-point Times Roman font from Atari for Epson 9-pin compatible printers. As the manufacturer's name is usually of no interest, most fonts now use the first 4 characters to identify the family.

- ✓ Facilitates ASSIGN.SYS files
- ✓ Easy inclusion/exclusion of whole typefaces

PROS AND CONS

- ✗ Atari naming convention only
- ✗ Font checking doesn't work as described

"Worth considering if you're definitely not moving up to SpeedoGDOS."

NAME: G_MAN PRO
COMPANY: 16/32 SYSTEMS
CONTACT: 0634 710788
PRICE: £49
MIN MEMORY: 0.5MB

EASE OF USE	★★★★☆
DOCUMENTATION	★★★☆☆
EFFECTIVENESS	★★★☆☆
VALUE FOR MONEY	★★★☆☆

OVERALL 73%

SPEED OF SIGHT

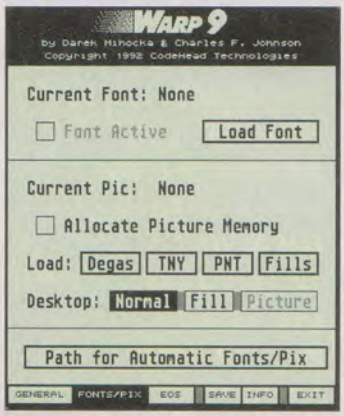


Warp 9 is purported to be the fastest Atari screen accelerator – but does it live up to such star billing? Ofir Gal finds out...

Described by CodeHead Technologies, the creators of the program, as the fastest, most compatible screen accelerator available for Atari computers, *Warp 9* now features Falcon compatibility and other improvements. But with tough competition from *NVDI*, can this claim be justified?

WHAT YOU GET

Three versions of Warp 9 are supplied – ST, TT and Falcon. The latter version does not support True Colour modes, but works well in all other resolutions. There's a configuration desk accessory and a large selection of alternative screen fonts for replacing the standard system font.



You can change the boring old system font or replace the desktop pattern with a picture file or pattern.

The configuration accessory lets you swap fonts, load a background picture for the desktop and offers various mouse enhancements including a versatile mouse accelerator and horizontal/vertical wrapping. When the mouse reaches one end of the screen it immediately wraps around and appears at the other. Such tricks are really down to personal taste.

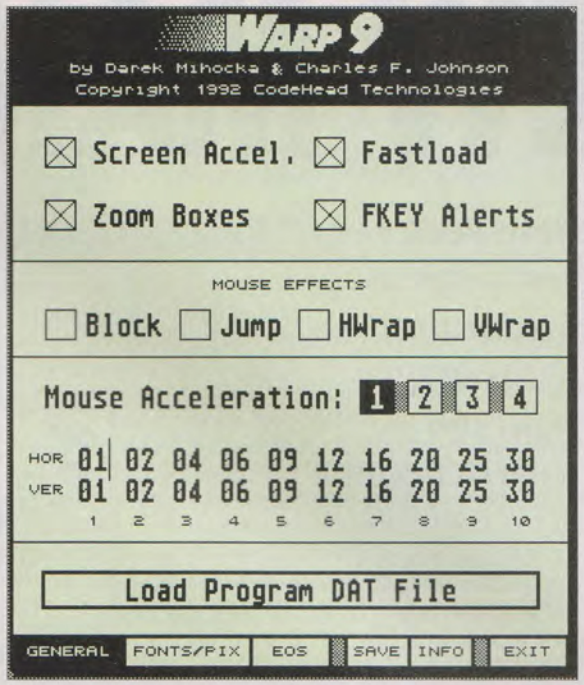
The second disk contains a modular screen saver called *Extend-O-Save* which comes with a large selection of modules and allows you to write your own. The saver modules are fully animated and can be set to respond to mouse, keyboard, screen, modem or even MIDI activity.

GET YER SKATES ON!

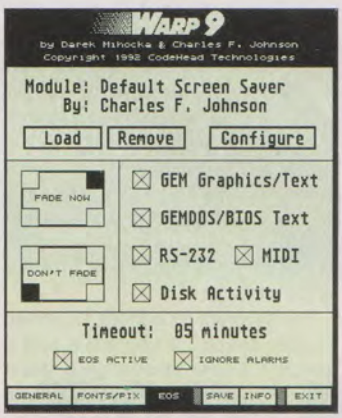
Of course, the most important feature of *Warp 9* is the screen acceleration which is performed by replacing the ten year old Atari display routines with super efficient machine code ones.

On average, the system graphics are three times faster. Standard text, as used by programs like *1st Word Plus* and many other text editors, is almost seven times faster with *Warp 9* installed, while text scrolling experiences a three-fold increase. Curiously, *Warp 9* does not improve the VDI graphics routine, which may be noticeable with drawing and CAD programs. As most programs do far more than just put text on screen, the tables show that speed tends to be doubled at best.The Falcon version produces similar results in monochrome modes. In colour modes, *Warp 9* does not excel and is nowhere near as fast as *NVDI*. It also appears to be incompatible with *MultiTOS* and ScreenBlaster, a Falcon screen enhancer, and does not work in True Colour. However, it is compatible with *Geneva*.

A useful feature is the ability to switch off the so-called zoom boxes that are usually displayed before and after dialogue boxes appear. This speeds up the display dramatically, but requires the *Warp 9* control accessory to be loaded.



Warp 9 can be configured using the included control panel accessory. The various options include a fully adaptable mouse accelerator.



Extend-O-Save, a fully configurable screen saver, can be set from Warp 9's control panel.

VERDICT

Warp 9 is a good product, but with direct competition from *NVDI*, the choice is a difficult one. It works well and is highly compatible, except in the situations mentioned earlier. The mouse accelerator and screen saver are also excellent but similar products are available in the public domain or as shareware. But with a retail price of just £29.95, it undercuts *NVDI* by a substantial margin. As always, you pays your money...

- ✓ Very effective screen acceleration
- ✓ Low cost
- ✓ Flexible screen saver included

PROS AND CONS

- × Incompatible with MultiTOS
- × Not as effective in Falcon colour modes

"A powerful screen accelerator with a host of extra features."

NAME: WARP 9 v3.80
COMPANY: THE ST CLUB
CONTACT: 0625 455250
PRICE: £29.95
SYSTEM: ANY ATARI
MIN MEMORY: 0.5MB

EASE OF USE	★★★★★
DOCUMENTATION	★★★★★
EFFECTIVENESS	★★★★★
VALUE FOR MONEY	★★★★★

OVERALL 86%

WARP 9 VS NVDI

When looking at Warp 9, the inevitable question has to be: how does it compare with NVDI – is it better or worse? Is NVDI worth the extra cost? Which is more compatible?

Unfortunately, the answer is not as simple as you might think as the programs have plus points in different areas. To be able to understand this, we need to quickly delve into the secrets of the operating system...

WHAT YOU SEE...

All programs display items on the screen, ranging from simple text messages to complex colour graphics. They accomplish this by asking TOS to do the job for them. A program that wants to display the word "Hello" does so by calling TOS and requesting it to display the word. Optionally, the program may also request TOS to display the text using a GDOS font or in colour and may even specify where on screen the word should be shown.

GET A MOVE ON!

Screen accelerators like *NVDI* and *Warp 9* work by replacing some or all of the display-related TOS routines with faster ones, resulting in the speeding up of these tasks. Programs usually have to wait until TOS has completed its task before they can continue their operation. The faster TOS displays the text or graphic, the quicker the program can get back to work. Take a typical task of scrolling a file in a word processor – although the program appears to be simply moving text on screen, it is doing a whole lot more. Depending on how it was programmed, it may be copying the text from one memory area to another or reformatting the text and ensuring that it is displayed with the correct fonts and point sizes. Only then can it ask TOS to update the screen. This is the only part of the task that *NVDI* or *Warp 9* can speed up.

If you follow the logic of this, it should become clear why the results in table 3 are not as impressive as those obtained with a dedicated test program.

VIVE LA DIFFERENCE

By studying the results of the tests, it becomes apparent that the two programs take very different approaches to achieve acceleration. *NVDI* works by replacing every screen-related TOS routine which is reflected in the various tests.

Warp 9 appears to optimise only some of the routines. It takes the reasonable approach that some routines are rarely used and instead of accelerating these it concentrates on the more commonly used ones such as text output. Indeed, in some cases it is faster than *NVDI* in text-related tasks which is clearly reflected in the *1st Word Plus* tests.

Warp 9 also seems to lack blitting routines and relies totally on the internal blitter. This is no real problem if your machine is equipped with a Blitter chip, but on a Blitter-less machine *NVDI* wins hands down. This also affects the Falcon colour modes because the Falcon Blitter chip is not very effective and causes the display to unpleasantly shudder when scrolling. With *NVDI* installed, it is possible to disable the Blitter and use its routines instead which are just as fast but much smoother.

FINAL ANALYSIS

NVDI is undoubtedly a superior product all round and a better buy if you have an ST without a Blitter or a TT. It is also far more effective than *Warp 9* in Falcon colour modes. While *Warp 9* has the advantage of a lower price and many extra features, its incompatibility with *MultiTOS* and Falcon True Colour mode should be taken into consideration.

On an STE or MegaSTE, both of which have a hardware Blitter, there is not much difference in performance – and *Warp 9* is twenty quid cheaper...

TABLE 1 – FALCON TESTS

TEST	NVDI (2)	Warp 9 (2)	NVDI (16)	Warp 9 (16)	NVDI (256)	Warp 9 (256)
GEM Dialog Box:	165%	294%	119%	105%	71%	60%
VDI Text:	852%	970%	473%	69%	295%	128%
VDI Text Effects:	751%	878%	446%	69%	195%	158%
VDI Small Text:	704%	740%	309%	78%	245%	287%
VDI Graphics:	354%	102%	193%	60%	115%	36%
GEM Window:	139%	185%	80%	46%	45%	25%
Blitting:	120%	93%	32%	29%	5%	12%
VDI Scroll:	234%	241%	58%	38%	26%	21%
Justified Text:	182%	97%	92%	45%	54%	25%
VDI Enquire:	152%	103%	132%	79%	101%	66%
Average:	365%	370%	193%	61%	115%	81%

These results were obtained using *GEMBench* on a Falcon in 2, 16 and 256 colour modes (as shown in brackets) on a VGA monitor. As can be see, *NVDI* is much faster in the colour modes. All results compare with the Falcon running in monochrome mode.

TABLE 2 – STFM TESTS IN HIGH RESOLUTION

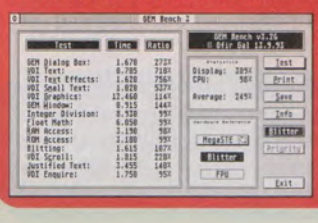
TEST	NVDI	Warp 9
GEM Dialog Box:	266%	258%
VDI Text:	749%	692%
VDI Text Effects:	664%	614%
VDI Small Text:	532%	540%
VDI Graphics:	359%	101%
GEM Window:	212%	194%
Blitting:	162%	96%
VDI Scroll:	316%	311%
Justified Text:	229%	113%
VDI Enquire:	202%	97%
Average:	369%	301%

From these tests, it can be seen that on an ST, without a Blitter chip, NVDI is a little faster than Warp 9.

TABLE 3 – SCROLLING TEXT AND GRAPHICS

TEST	Clean	NVDI	Warp 9
1st Word Plus	36	27	21
Atari Works	134	89	97
Works (256 colours)	200	170	182
Everest	96	60	78
GEMView (256 colours)	40	32	31

All tests were performed on a Falcon and show how long it took to scroll through a file – all times in seconds. *NVDI* can be seen to be slightly faster than *Warp 9*.



GEMBench showing Warp 9's performance on a 16MHz MegaSTE with Blitter enabled.

TECH TALK

The pros and cons of benchmarking...



As a new generation of system accelerators is now becoming available, the need to assess their performance against cost arises. One would think that this is a rather simple affair; after all, speed is a measurable quantity but the reality is quite different. In order to understand the complexity of this, let's take a car as an example. I can say a certain car can reach a speed of 125 miles per hour.

This sounds like a pretty fast car, but what I haven't mentioned is that it takes ten minutes to reach that speed! Not so good anymore. In fact, if you were to take this car for a long journey on the motorway, traffic allowing and motorway speed restrictions aside, you should be fine. But if you just want to get to your local supermarket you'd be better off just walking.

With computers the equation is much more complex. It is easy to blindly follow benchmark results, but not necessary correct. A certain Falcon accelerator board on the market shows almost 200% improvement under certain tests – that's twice as fast as a standard Falcon. The tests involve division and multiplication of numbers, something that all programs do almost constantly. The catch is that the test contains no memory access, which most programs have to do in order to store the results of the calculations. Since the accelerator board does not use a memory cache, memory access is not as fast. In fact, it is hardly improved. As a result, a program may well calculate much quicker but will be slowed down when trying to store the result.

Screen accelerators like *NVDI* and *Warp 9* show remarkable results using benchmarks. Text output is eight or nine time faster. But when you actually measure the performance of various word processors you can get conflicting results. Some programs are hardly improved while others are blindingly fast. This is because no program simply outputs text to screen in the way a benchmark program does.

Issues like floating point maths tests and FPU support are even more complex and open to wide fluctuation. So how does one measure the performance of a system?

I was debating this very issue while writing *GEMBench*. Rightly or otherwise, my conclusion was that a benchmark program should limit itself to purely performing tasks. The memory tests in *GEMBench* simply reads the computer's memory while the text and graphics tests do just that. Any attempt to imitate a "real-life" situation as some benchmark utilities for the PC do, is totally subjective and open to scrutiny. The downside of my approach is that one has to treat the figures with caution.

While products like *NVDI* greatly enhance the system and may indeed speed up text by a factor of nine, don't expect *Calamus* or *1st Word Plus* to be nine times faster. These programs do a lot more than just output text! With computers, the harder you try to measure their performance, the less accurate the results become. Go figure...

Aside from reviewing technical programs and hardware for *ST Review*, Ofir Gal is also the author of *GEMBench*, probably the best system test program on the ST. He keeps saying that the current release is the latest version – until next week, that is...

Experience profound relaxation and improved creativity – from just £229!

Create virtually any mental state you require, using the new **MindLab** – a state-of-the-art light-and-sound generator. Years of research have shown that the human brain will tune into the frequency of flashing lights and tones – which is why flickering flames are relaxing, and why rhythmic drumming fires your imagination. From the **MindLab**'s 25 carefully crafted programs you can choose the results you want – and get them fast:



"The MindLab is an electronic relaxation device that alters your brainwaves through the use of rhythmic light and sound" – ***Playboy***

RAPID RESULTS

- ***Relax effortlessly*** – and feel refreshed after a 20 minute session
- ***Feel energised*** with heightened awareness
- ***Stimulate your creativity*** – and experience vivid mental images
- ***Accelerate your learning*** – ideal for listening to study tapes
- ***Sleep deeply*** – a safe and drug-free solution

It's so easy to use: simply slip on the goggles, put on the headphones and press a couple of buttons to select the program you require. You'll achieve rapid results with just 15 to 25 minutes of use a day – and the experience is fun!

IT'S EXPANDABLE What's more, the **MindLab** is infinitely expandable: its unique extra ***PolySync*** circuitry allows you to transfer up to 25 new sessions from tape within 15 seconds. With your unit you will receive a special tape containing 42 further sessions – in addition to the 25 that are built-in – created by experts in the field of mental fitness. *(More new programs are available now!)*

HERE'S WHAT YOU GET:

- Sturdy and stylish custom-moulded **MindLab** unit – use it anywhere
- Soft-touch buttons for selecting from four tones, adjusting the pitch, adding 'binaural beats' and more
- Reflective goggles with red LEDs, and lightweight stereo headphones
- Crystal clear 15-page user manual
- FREE tape with 42 new sessions, and the astonishing *Revitalyzer* tape
- FREE lead to connect a tape unit – ideal for listening to relaxing music or study tapes
- Built-in rechargeable batteries
- Mains charger/adapter
- One year guarantee



All this for just £299

Or, you can choose the **Neuro-Synchronizer** (identical to the **MindLab** but without the down-loading facility) for just **£229**. *(You can upgrade later for £70.)*

In addition, if you order now, we will send you a FREE 36-page guide to light-and-sound machines written by Michael Hutchison, the best-selling author of *MegaBrain*.

• *NB: These units are not suitable for those who have had epileptic seizures.*

ORDER YOURS NOW! Ring Chris or Geraldine on 0625 858885 to place your order or ask any further questions – or fax them on 0625 850551. Office hours: 8.30am to 7pm and beyond.

Alternatively, fill out the coupon below, and send it to: ***MindLab Offer, LifeTools, Dept STR2, FREEPOST SK1852, Poynton, Stockport SK12 1FZ*** *(no stamp needed)*. We endeavour to despatch your order on the day we receive it by 48-hour courier, but allow 28 days for delivery just in case.

FREE catalogue! Send for a **FREE** catalogue of all our products including biofeedback units, air ionisers, accelerated learning courses, deep relaxation tapes, ground-breaking books and more.

All prices include VAT. Trade enquiries welcome.

LifeTOOLS *New technology for a more fulfilling life*

Please send me the items marked below. I understand that if I am not completely satisfied I can return my purchase within 15 days for a full refund. STR2

❑ Please send me:

Qty	*Items*	*Price*	*Total*
___	MindLab	£299	£___
___	NeuroSynchronizer	£229	£___
___	36-page guide to light-and-sound		FREE
	Packing and Parcel Force delivery		£3.50
		Total:	£___

❑ Please send me the full LifeTools catalogue.

❑ I enclose a cheque for £_____

❑ Please debit my Access/Visa number:

|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|

Expiry date:_____

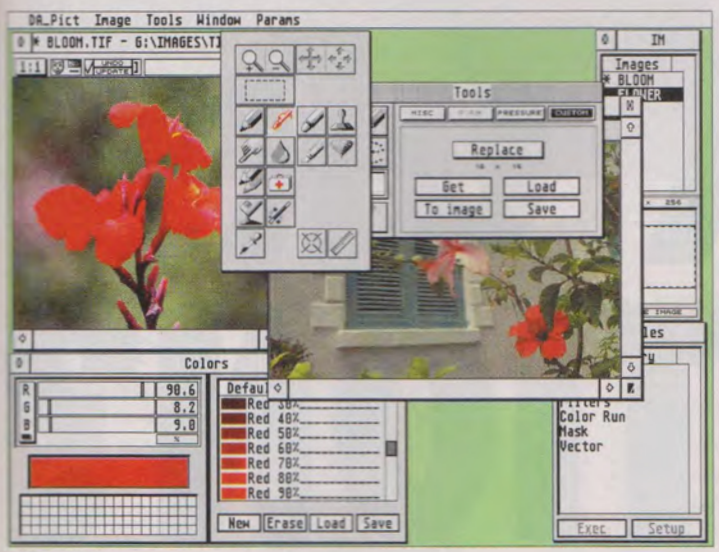
Signature _____

Name _____

Address _____

_____

_____ Postcode _____



DA's Picture – a stunning interface fronts a powerful program.



Impressive colour – DA's Picture in VGA true colour mode on a Falcon.

FULL PICTURE

Andrew Wright previews DA's next venture – a top end image processing package

DA's Vector is arguably the most powerful piece of software available on the Atari platform and one that has enjoyed tremendous success both here and in Germany. Not surprisingly the same programming team has decided to add another string to its bow with the forthcoming release of *DA's Picture*, a comprehensive image processing program with a long list of professional features.

Oddly enough, the latest in DA's lineup looks nothing at all like *DA's Vector*. Indeed, if it weren't for the names of the programs in the top left hand corner, it would be hard to tell that they came from the same stable. Where *DA's Vector* uses an icon-based approach with a fixed toolbox on the left hand side of the screen, *DA's Picture* uses floating toolboxes, dialogue boxes and menus in separate windows similar to *Chagall*, another image processing program from CGS, previewed in the last issue. The icons and toolboxes aren't quite as attractive as those in *Chagall*, perhaps, but they're still streets ahead of those in competing products like *TrueImage* and *Studio Photo*. One interesting addition is the array of icons attached to each individual image just under the window bar, covering magnification level, mask status and undo.

Perhaps the most innovative feature is the drag 'n' drop colour handling. Colours can be loaded from a library by clicking and dragging the appropriate colour with the mouse and depositing it on the main palette. To use that colour, simply drag it across to the current colour box. Similar tricks can be carried out in reverse – you can use the colour picker to take a colour from the page, drag it to the colour editor to examine its colour components or drag it to the library and store it permanently.

The main features of *DA's Picture* include multiple images in separate windows, a comprehensive set of filters for enhancing and altering images, powerful colour gradient tools and three different types of masking. There are single-bit bitmap masks that let you mask individual colours or groups of colours and 8-bit greyscale masks that allow the application of special effects or enhancements with a gradual decrease in the effect at the edge of the masked area. There are also vector masks that let you create vector shapes around parts of an image.

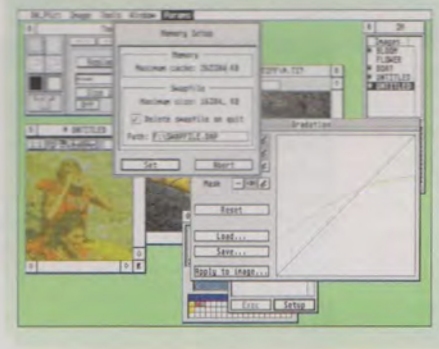
The vector shapes can be created within the program or in more powerful packages like *Didot Professional* and *DA's Vector*, imported into *DA's Picture* and even used as brush paths. This means you could create a complex vector path – text, for example – and then have an airbrush or stamp tool actually draw along that vector path!

DA's Picture is expected to work on any Atari with 2Mb or more of memory but as the program has its own virtual memory manager to spool large images to the hard disk, you shouldn't have to keep feeding in RAM chips to work on big images. There will be some speed loss, of course, but that will depend on the size and type of hard disk used. It should also work in any resolution, including monochrome, but you would be advised to check with the distributor when it is actually released. Pricing hasn't yet been decided but it already looks as if it will be one of *the* programs of 1994...

VIRTUAL MEMORY

One of the biggest problems with image processing is the sheer size of the images. A single 24-bit colour image, three inches square at a resolution of 300 dpi, will take up some 2.5Mb of memory. No problem on a hard disk but it doesn't leave much room for the main program and accessories on a 4Mb system. Neither is there any room for an undo buffer or working memory if you want to apply a filter or special effect.

Virtual memory drivers treat an area of the hard disk as an extension of the computer's RAM, storing parts of large images that can't be held entirely in memory and storing additional copies of an image in case the user decides against a particular action and wants to restore the image to the way it was before. *DA's Picture* has its own highly effective virtual memory system which allows almost unlimited "pseudo" RAM.



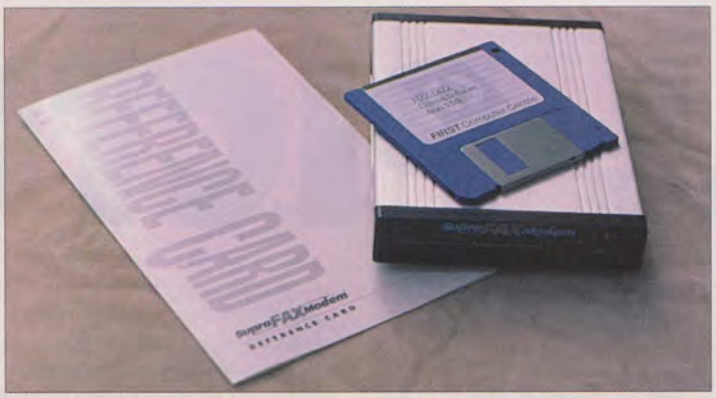
Virtual reality – DA's Picture's virtual memory settings.

In search of on-line thrills without the bills? Join Nial Grimes as he takes Supra's affordable FAX-Modem Plus for a quick spin around the block...

FAX OR FICTION?

Far from being the haven of the rich as it once was, "comms" is fast becoming an essential part of computing life. It can give you access to the latest shareware from around the world, introduce you to dozens of like-minded computer users and keep you up to date with the very latest computing news – all at the cost of a phone call.

This trend is largely thanks to the falling prices of high specification modems, of which the SupraFAX Plus is a prime example. Although it only packs a relatively sedate 2,400 baud rate (that's about one kilobyte every four seconds) the Supra includes MNP and V42bis compression which can quite easily push that figure up to 4,800, or even 9,600 bits per second. Add a fax capability and you have one very well specified modem.



If you're in the market for a high specification modem that won't break the bank, the SupraFAX Plus is well worth a look.

IGNITION!

Out of the box, the Supra comes with everything you need to get up and running, including cable, comms software and the usual plethora of adverts for bulletin boards (in this case American, just like the modem!). It's a smart looking, well-built unit that screams quality from its polished aluminium casing. The manual is quite helpful and very comprehensive, although it does make the mistake of mixing the beginner's information with the more technical details. A quick reference card is also included – just as well really, because some bright spark decided to put the sticker which explains the LEDs on the bottom of the modem's casing!

Communications software arrives in the form of the *Freeze Dried Terminal* which is a very good choice, being lightning fast and very powerful. Unfortunately, in our case the "plug and play" ideal was somewhat spoilt by the complete lack of any software on the disk, but we take it that this isn't a regular occurrence! Connection and software obstacles out of the way, the modem fires up immediately and works to perfection with Fizz-Dizz. A minor amount of fiddling is required to tailor the software exactly, but it does at least come ready set-up for fast tone dialling and providing the baud rate is set accordingly, the modem will automatically negotiate the fastest transfer speed available. If you intend to use the modem as a fax machine, the required software costs an extra £39.95.

The performance you can expect to receive from the Supra varies, depending on what sort of data is being transferred at the time. ASCII text yields the best results, with figures in excess of 600cps being a regular occurrence on a V42bis connection.

If you are transferring a file that has already been compressed (such as an archive) the rate drops to around 275cps, which can appear painfully slow on larger files. On the bright side, hardware error correction sees to it that the connection remains constant and faults are very rare, even on bad lines.

MONEY WELL SPENT?

The SupraFAX is a reliable, well built modem with a fair turn of speed. If file transfers make up a large percentage of your work, you'd be well advised to go for something a bit faster, but for beginners and those interested purely in conferencing, it's nothing short of ideal. The only fly in the ointment is the lack of BABT approval, but the Supra badge on the front suggests it's not the sort of device that will blow up your local telephone exchange, and word has it that approval may not be too far away.

THE FAX OF LIFE

The SupraFAX Plus, as the name suggests, doubles as a fax machine. Unlike some cheaper units, it can both send and receive messages and will happily talk to any variety of desktop fax. At least, that's the theory. In practice, you have to accept that no fax modem is ever going to be as compatible as a real fax machine. Bearing this in mind, the Supra copes surprisingly well.

Don't forget though, you will need some form of fax software. *Straight Fax* is probably the best bet and can be bought directly from First Computer for £39.95.

✔ Quality of construction
✔ Good specification

PROS AND CONS

✗ Not BABT approved
✗ Can be slow on compressed files

"Solid construction and a reasonable turn of speed combine to make the SupraFAX a good value modem in its class."

NAME: SUPRA FAX-MODEM PLUS
COMPANY: FIRST COMPUTER CENTRE
CONTACT: 0532 319444
PRICE: £119.99
MIN MEMORY: 0.5MB
SYSTEM: ST/TT/FALCON

EASE OF USE	★★★★★
DOCUMENTATION	★★★★½
EFFECTIVENESS	★★★★½
VALUE FOR MONEY	★★★★★

OVERALL 81%

Premier Mail Order

Please send cheque / PO (made out to Premier Mail Order) / Access / Visa No. and expiry date to:

Dept STR22, 7-10 The Capricorn Centre, Cranes Farm Road, Basildon, Essex SS14 3JJ. Tel: 0268-271172 Fax: 0268-271173

Telephone orders: Mon-Fri 9am-7 pm and Sat & Sun 10am-4pm, We Are Open 364 Days A Year

P&P and VAT is included for all UK orders. Please add £2 P&P for Europe and £3.50 for Rest of the World

Next day delivery service available £4 per item. Some titles may not be released at the time of going to press. (E&OE)

1st Division Manager	6.99
3D Construction Kit 2	32.99
A320 Airbus Europa Edition	22.99
A320 Airbus USA	**22.99**
AV8B Harrier Assault	**22.99**
Addams Family	8.99
Air Support	19.99
Alien 3*	19.99
Ancient Art of War in the Skies	**22.99**
Another World	19.99
Archer Maclean's Pool	16.99
Armour Geddon	9.99
Atomino	9.99
Award Winners (512K)	19.99
Awesome	9.99
B17 Flying Fortress	**22.99**
Barbarian 2	9.99
Bart vs The World	**17.99**
Bat 2	22.99
Batman Returns	16.99
Battlehawks 1942	10.99
Battletoads*	17.99
Bart vs the Space Mutants	8.99
Beast 2	9.99
Blue Angels	8.99
Board Genius	**19.99**
Bully's Sporting Darts	8.99
Caesar	19.99
California Games 2	16.99
Campaign (512K)	22.99
Campaign 2	22.99
Campaign Mission Disks	11.99
Cannon Fodder	20.99
Championship Manager 93	16.99
Championship Manager 94 Season Disk	8.99
Chaos Engine	**16.99**
Chuck Rock 2*	16.99
Civilisation	**22.99**
Cohort 2	19.99
Combat Air Patrol	19.99
Creatures*	16.99
Cruise for a Corpse	12.99
Crystal Kingdom Dizzy	14.99
Cyberspace*	22.99
Dark Mere	21.99
D Day	22.99
Dizzy Collection	16.99
Dizzy's Excellent Adventure	16.99
Dogfight*	**22.99**
Dragon's Lair 3*	22.99
Dreamlands	19.99
Dream Team	17.99
Dynablaster	19.99
Elite 2 (Frontier)	**19.99**
Elvira The Arcade Game	16.99
Epic	19.99
European Champions	**17.99**
European Super Soccer	16.99
Eye of the Storm	19.99
F1	17.99
F15 Strike Eagle 2	14.99
F19 Stealth Fighter	12.99
F29	10.99
FA Premier League Football (1 Meg)	17.99
Face Off Hockey	8.99
Fantastic Worlds	22.99
Fantasy World Dizzy	6.99
Fast Food Dizzy*	6.99
Final Fight*	8.99
Fire and Ice	16.99
Firehawk	14.99
First Samurai + Mega Lo Mania	19.99
Flight of the Intruder	10.99
Footballer of the Year 2	7.99
Formula One Champions	17.99
Formula One Grand Prix	22.99
Goal	**20.99**
Graham Gooch (1 Meg)	**19.99**
Graham Taylors Soccer Challenge	8.99
Gunship	10.99
Gunship 2000*	22.99
Hard Drivin 2	8.99
Hard Nova	8.99
Heroquest	7.99
Hill Street Blues	8.99
Hook	8.99
Huckleberry Hound in Hollywood	8.99
IK+	6.99
Int. 3D Tennis	7.99
Int. Rugby Challenge	17.99
Int. Sports Challenge (512K)	19.99
Ishar 2*	20.99
Jaha..gir Khan World Championship Squash	7.99
Jimmy White's Snooker	(see The Greatest)
Kick Off 2	7.99
K.O. 2 - Final Whistle	5.99
K.O. 2 - Winning Tactics	5.99
Killing Game Show	9.99
Kingmaker	22.99
Knightmare	8.99
Knights of the Sky	12.99
Leander	9.99
Legends of Valour	**24.99**
Lemmings 2 (The Tribes)	**17.99**
Lemmings Double Pack	19.99
Lethal Weapon	16.99
Loom	12.99
Lotus Esprit Turbo Challenge	7.99
Lure of Temptress	(see The Greatest)
M1 Tank Platoon	12.99
Magic Boy	17.99
Mega Traveller 1 (1 Meg)	19.99
Megatwins	8.99
Midwinter	10.99
Midwinter 2	14.99
New Zealand Story	8.99
Nicky 2	17.99
Nick Faldo*	22.99
Nigel Mansell World Champ	19.99
Night Shift	10.99
No Second Prize	**17.99**
Obitus	9.99
Oh No More Lemmings	9.99
One Step Beyond	13.99
Operation Harrier	8.99
Operation Stealth	11.99
Parasol Stars	8.99
Pirates	10.99
Populous 2 (1 Meg)	19.99
Populous Promised Lands	17.99
Powermonger & WW1 Data Disk	12.99
Premier Manager	**17.99**
Premier Manager 2	17.99
Prince of Persia	6.99
Pro-Tennis Tour	8.99
Pushover	8.99
Rampart	16.99
Reach for the Skies	**19.99**
Renegade Vol 2*	17.99
Risky Woods	8.99
Robin Hood	10.99
Robocop	6.99
Robocop 3	10.99
Rookies	17.99
Scrabble	**20.99**
Sea Air Rescue*	22.99
Secret of Monkey Island	12.99
Sensible Soccer '92/'93	16.99
Shadow Lands	8.99
Shadow Worlds	19.99
Shuttle	(see The Greatest)
Silent Service 2	22.99
Sim City + Populous	**19.99**
Simpsons	(see Dream Team)
Sleepwalker	21.99
Slicks*	14.99
Space Crusade	16.99
Special Forces (512K)	22.99
Spellbound Dizzy	6.99
Streetfighter 2 (1 Meg)	19.99
Striker	8.99
Strip Poker 2 + Data	6.99
Super Cauldron	17.99
Superfighter	17.99
Super League Manager	17.99
Super Space Invaders	8.99
Switchblade 2	8.99
Team Yankee 2 (Pacific Islands)	19.99
Tennis Cup 2	8.99
Tetris	14.99
The Greatest	**21.99**
The Patrician	22.99
The Immortal	10.99
Thunderstrike	7.99
Toki	8.99
Tornado	**22.99**
Toyota Celica GT Rally	6.99
Trolls	**16.99**
Turbo Challenge	8.99
Turbo Challenge 2	8.99
Turbo Challenge 3	16.99
U96*	22.99
Ultimate Golf	6.99
UMS Compilation	**27.99**
Universal Monsters*	16.99
Utopia	8.99
Utopia + Data Disk	19.99
War in the Gulf	20.99
When Two Worlds War	19.99
Winter Supersports	16.99
Wizkid	16.99
WWF1*	8.99
WWF2	8.99

SPECIAL OFFERS

Dizzy Panic	4.99
Football Crazy	9.99
Kick Off + Extra	4.99
Microprose Golf	14.99
Ninja Collection	9.99
Popeye 2	4.99

JOYSTICKS/ACCESSORIES

40 Capacity 3.5" Disk Box	4.99
80 Capacity 3.5" Disk Box	6.99
Cheetah 125+	7.99
Competition Pro Extra	14.99
Competition Pro 5000	13.99
Quick Joy Top Star	17.99
Quick Joy 2 Turbo	10.99
Quick Joy Jet Fighter	10.99
Suncom Tac 2	7.99
Suncom Slik Stick	5.99
Wico "Q" Stick	4.99

EDUCATIONAL

ADI English (All ages)	17.99
ADI French (All ages)	17.99
ADI Maths (All ages)	17.99
Better Maths (12-16 GCSE)	13.99
Better Spelling (8+)	13.99
Cave Maze (8-12)	9.99
Fraction Goblins (8-13)	9.99
Fun School 2 (UNDER 6)	6.99
Fun School 2 (6-8)	6.99
Fun School 2 (8+)	6.99
Fun School 4 (UNDER 5)	16.99
Fun School 4 (5-7)	16.99
Fun School 4 (7+)	16.99
Junior Typist (5-10)	10.99
Magic Maths (4-8)	13.99
Maths Dragons (6-13)	9.99
Maths Mania (8-12)	13.99
Noddy's Play Time (3-7)	16.99
Picture Fractions (7-10)	9.99
Playroom (3-8)	17.99
Playschool (3-8)	13.99
Reasoning with Trolls (5-12)	9.99
The Three Bears	13.99
Tidy The House (6-10)	9.99

3.5 BLANK DISKS

	TDK	VERBATIM	PRECISION	UNBRANDED	RECYCLED
10	7.99	6.49	5.99	4.50	
20	14.50	11.99	10.99	8.50	
30	21.99	17.49	15.99	12.00	
40	28.49	21.99	20.49	15.00	
50	35.00	26.00	23.99	17.50	
100	65.00	49.99	44.99	35.00	

Important Announcement

We would like to thank all our customers and friends for their support in 1993, this has allowed us to grow and provide a continued and better service for 1994. We can now boast an actual human being on the other end of the telephone, 9am till 6pm Monday to Saturday to take your Credit Card orders, answer your queries and offer advice where needed. If you feel you would like to meet us in person then come along and see us at any of the ATARI exhibitions, up and down the country, that you will see advertised in this magazine. We look forward to seeing you all and please remember that whatever you need for your ATARI, we will be happy to locate and supply those hard to find items at competitive rates.

Textile Transfer Papers
INKJET VERSION
Now in STOCK

We supply a range of items from companies such as:
SYSTEM SOLUTIONS
COMPO ... ST CLUB
ZZ SOFT ... INKMUN

SUNDRIES
Mice
Mouse Mats
Mouse Houses
Blank Disks
Disk Boxes
Disk Labels
Copy Holders
Printer Stands
Cleaning Kits

SCSI HARD DRIVES
Bare or Ready to roll
Call now for some Great Deals & Unbeatable Prices

INKJET Refills & Papers
DOT MATRIX Ribbons
Various JOYSTICKS
ALWAYS IN STOCK

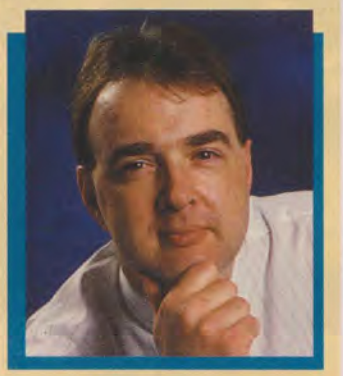
WARPZONE PDL.

MORE THAN JUST A P.D. LIBRARY

for more info or to order CALL NOW on 0272 553758

WRIGHT ISSUES

A right pain in the wrist...



Last month a High Court judge dismissed a claim for compensation for RSI – repetitive strain injury – because it wasn't in the medical textbooks. That made me feel really good because for some time I've had a problem with my right wrist that I'd put down to a mild form of RSI (no jokes please). Hearing that it no longer existed cheered me up no end, as you can imagine.

I had always assumed that the problem, a recurring ache in the centre of my hand, was what is known as carpal tunnel syndrome, a common complaint to do with overuse of the mouse, and that if I adjusted the way I work – used the keyboard a little more and the mouse a little less – it would go away.

It didn't. At least not until I took some medical advice, bought a new mouse (a change is as good as a rest apparently) and a new office-style chair. The doctor prescribed a lot of non-keyboard wrist exercises. My wife suggested painting the house. The ache started to subside quite rapidly after that...

Now, obviously, I'm sympathetic to the poor journalist who had his claim so ignominiously quashed but I'm not going to harp on about out-of-touch judges or bemoan the decline in British justice. Even if it was the same judge that gave a rape victim £500 for a good holiday. That's not my place.

What I am going to say is this. RSI does exist and once you've got it, it doesn't appear to go away. If you find yourself sitting at your keyboard long into the night, take precautions now. Not tomorrow – now. I've been writing full time for some four or five years and I had no inkling whatsoever of this wrist strain or whatever it is until the first sharp pain in the hand a few weeks back. It wasn't gradual, it was immediate.

Learn a lesson from me, please. Take frequent breaks from the mouse and keyboard, make sure you sit properly with hands relaxed and comfortable and don't keep your right hand clutching that mouse for all it's worth. Better still, get an adjustable keyboard like the one on the old Mega STs or even try a PC keyboard with a special cable from System Solutions and maybe a wrist rest in front of the keyboard. Vic Lennard, *ST Review*'s editor, swapped his mouse for a trackball years ago. The trouble is, as you can see from his picture, he gets RSI just from smiling...

Andrew Wright is a freelance journalist and writer and has been a contributor to ST Review since its inception. We suspect he's one pain that will never go away...

WIZARD GAMES

1 NORTH MARINE ROAD, SCARBOROUGH, NORTH YORKSHIRE YO12 7EY TEL: 0723 376586

FROM WIZARD GAMES

B17 FLYING FORTRESS £15.99
BILLIARDS SIM £7.99
BULLY'S SPORTING DARTS £6.99
BUBBLE DIZZY £5.99
BUBBLE BOBBLE £5.99
CALIFORNIA GAMES 2 ..... £9.99
CORPORATION £6.99
CJ IN THE USA £5.99
CJS ELEPHANT ANTICS £5.99
CRYSTAL KINGDOM DIZZY £9.99
DALEK ATTACK £9.99
DIZZY PANIC £5.99
ENGLAND £4.99
EUROPEAN CHAMPIONSHIP £9.99
F1 TORNADO £4.99
F29 RETALIATOR £10.99
FRONTIER ELITE 2 ..... £21.99
GOLD OF THE AZTECS £7.99
GAUNTLET 3 ..... £9.99
GODFATHER £6.99
GRAHAM GOOCH WORLD CLASS CRICKET £14.99
HARLEQUIN £7.99
HERO QUEST + RETURN OF THE WITCHLORD £10.99
INTERNATIONAL TRUCK RACING £5.99
KICK OFF 2 ..... £5.99
KNIGHTS OF THE SKY £10.99
LITTLE PUFF £5.99
LIVERPOOL £8.99
LOTUS TURBO CHALLENGE £4.99
MCDONALDLAND £9.99
MATCH OF THE DAY £9.99
MANHUNTER SAN FRANCISCO 2 ..... £9.99
MICROPROSE GRAND PRIX £14.99
NIGEL MANSELL £10.99
NIGHTSHIFT £10.99
PARASOL STARS £9.99
PLAN 9 FROM OUTER SPACE + VIDEO OF FILM £8.99
POPULOUS – PROMISE LANDS £10.99
PREMIER MANAGER £10.99
RAILROAD TYCOON £16.99
REACH FOR THE SKIES £15.99
SHOOT EM UP CONSTRUCTION KIT £5.99
ROBOCOP 2 ..... £6.99
SILENT SERVICE 2 ..... £14.99
SIM CITY £7.99
SPACE 1889 ..... £9.99
SPACE CRUSADE + VOYAGE BEYOND £15.99
STREETFIGHTER 2 ..... £10.99
STRIKER £7.99
SUN CROSSWORDS £6.99
SHINOBI £4.99
TERMINATOR 2 ..... £6.99
THE ART OF WAR IN THE SKIES £14.99
THUNDERBIRD £5.99
TOYOTA CELICA RALLY £5.99
TIMES CROSSWORDS £6.99
VIDEO KID + KID GLOVES £9.99
ULTIMATE GOLF £5.99
UTOPIA TWIN PACK £12.99
WWF £6.99
WWF 2 ..... £6.99
WORLD RUGBY £5.99
ZOOL £14.99

EDUCATION

PLAYDAYS 3-8 YRS £9.99
FUN SCHOOL 2 Under 6/6-8/Over 8 ..... £6.99
NODDY'S PLAYTIME 3-8 ..... £16.99
MAGIC STORY BOOK 5-14 YRS £9.99
(Write, Illustrate, Add Sounds, Animate your own stories

DOUBLE PACKS

POSTMAN PAT 1 AND 3 ..... £6.99
COUNT DUCKULA 1 AND 2 ..... £6.99
THOMAS THE TANK ENGINE 1 AND 2 ..... £12.99
HUCKLEBERRY HOUND + PIXIE & DIXIE £9.99
PACLAND/PACMANIA £6.99
POWER MANAGER + WW1 ..... £10.99

WIZARD SPECIAL ANY 3 FOR £10.00

BSS JANE SEYMOUR
SUSPICIOUS CARGO
VENUS FLYTRAP
NEIGHBOURS
DISC
TUSKER
VOODOO NIGHTMARE
GUARDIANS
MINDFINDER
WINDWALKER
SNOWSTRIKE
MANIX
RESOLUTION 101
XYBOTS
GEM X
HOVERSPRINT
INFESTATION
TOP BANANA
NITRO
CENTREFOLD SQUARES
STRIP POKER
ACTION SERVICE
CARV-UP
MONTY PYTHON
OVERLANDER
TINTIN ON THE MOON
SUPER SQUEAK
JAMES BOND COLLECTION
HANNABARBERRA COLLECTION

COMPILATIONS

BOARD GENIUS
CLUEDO, SCRABBLE, RISK £19.99

THE GREATEST
JIMMY WHITE, LURE OF THE TEMPTRESS, SHUTTLE £19.99

KIDS PACK
POSTMAN PAT, THE MUNSTERS, COUNT DRACULA £6.99

16 BIT MACHINE
SUPER CARS, SKIDZ, SWITCHBLADE, AXEL'S MAGIC HAMMER £6.99

SUPER ALL STARS
ROBIN HOOD, MAGICLAND DIZZY, STEG THE SLUG, CAPTAIN DYNAMO, CJ IN THE USA £12.99

PSYCHO'S SOCCER
KICK OFF 2, MAN UTD, INTERNATIONAL SOCCER CHALLENGE, WORLD CHAMPIONSHIP MANAGER £9.99

COMPUTER HITS 2
TETRIS, TRACKER, JOE BLADE, TAU CETI £5.99

THE POWER PACK
XENON 2, LOMBARD RAC RALLY, TV SPORTS FOOTBALL, BLOODWYCH £9.99

FLIGHT COMMAND
ELIMINATOR, STRIKE FORCE HARRIER, SKYCHASE, LANCASTER, SKYFOX II £9.99

SPORTS COLLECTION
PRO TENNIS, WORLD CUP SOCCER, RUN THE GAUNTLET £9.99

HIGH ENERGY
NORTH & SOUTH, TINTIN ON THE MOON, FIRE & FORCE, TEENAGE QUEEN, HOSTAGES £10.99

GAMES SUBJECT TO AVAILABILITY. PLEASE NOTE – A PHONE CALL RESERVES YOUR ORDER.
ORDERS UNDER £5.00 ADD 50p POSTAGE AND PACKING.
CHEQUES AND POSTAL ORDERS MADE PAYABLE TO WIZARD GAMES. PLEASE ALLOW 7 DAYS FOR DELIVERY. OVERSEAS ORDERS PLEASE ADD £2.00 PER ITEM, EEC OR WORLD.

PROFESSIONAL FOOTBALL MASTERS 4 VERSION

Quite simply the best Football management game for your computer. We have served thousands of satisfied customers during our 4 years of trading. Over 10,000 man hours (during 5 years) has been dedicated to the production of this games constant improvement and it must be one of the most realistic and accurate representations of a professional football managers job. Main features below:-

Managers : 1 to 4 Human players, Ratings, Performance statistics, sack and offers. 3 Difficulty levels, Manager of the month and season awarded, Pools, Pick any team in any division to begin with.

League & Cup : Premier 22 teams, Division 1,2 & 3 have 24 teams, Play-offs, Tables. 7 Cup competitions with precise rules (2 legs, extra time, away goal rule, seeded draws, European Cup tables, 5 subs, non-domestic player restrictions etc.), Finalist route to glory.

Games : Yearly fixture/previous list, Week fixtures/results, Results from previous meeting with opponent (goes back up to 6 seasons).

Players : Real life statistics reflecting the start of 93/94 season with real positions, height, age. Live transfer market, Contract & wage negotiations, Preferred foot (left/right/both), Loans, Injuries, Training, Special talents, Trainees, Goalkeepers (separate skill categories), Defenders, Midfielders, Attackers & Utility, Retirements, Foreign transfers, Unhappy players, Top 10 Hot shots.

Team : Training, Tactics (15 different styles), Aggression, Formation allows specific player field settings (Left winger, Sweeper etc.).

Club : Sponsorship, Ground improvements, View opponent, Finances

The Match : Real time scoreboard reporting goals & injuries yellow/red cards, Sound effects, Interventions permitted at any time to change tactics, formations and make subs. Physical graphical penalty participation (optional). Over 80 different referees.

Other : Fast load/save, Printer access, 20 Options to set various game preferences, Instruction book, Easy to play, Technical support.

Plus : Over 100 other meticulous refinements impossible to list here.

Editor : Allows you to amend various items in saved games. £12 Extra

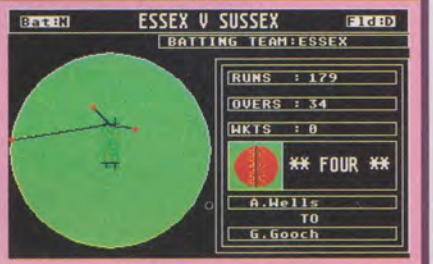
Scottish : Dedicated version details available upon request.

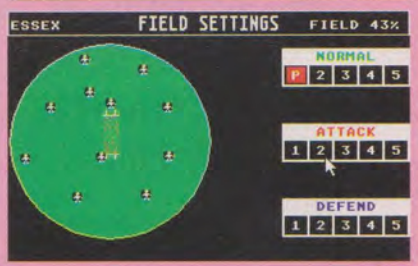


CRICKET MASTERS

This is a purely managerial cricket manager game that concentrates on strategy and includes plenty of relevant statistics. The game has been designed and developed by a true fan of the sport. It replicates everything that a real manager has to contend with and it's a totally unique production that anyone with an interest in Cricket should experience. A summary of the main features is shown below:-

- AXA EQUITY & LAW 18 league county teams, 50 overs per game.
- 4 Cup competitions including Benson & Hedges, Nat West.
- 20 different match umpires with accurate names and strictness.
- Accurate player details Surname, height and age.
- 27 different player attributes, most have a direct impact on the effectiveness of each individuals actions during a simulated match.
- Easy player selection. All game text is clearly presented.
- Batting and bowling averages. Top batting and bowling tables.
- 3 Different training intensities to boost batting, bowling or fielding.
- Weather, pitch and light often make an impact on ground condition.
- Full match highlights let you watch the action ball by ball with full graphics and/or realistic sampled sound effects for significant events (Fours, Umpire decisions, etc.). Interventions are permitted at any time to change batting tactics or fielding placings.
- 3 Batting/Bowling classifications (Normal, Attack and Defend).
- Choice of 15 different field placings, Manager rating.
- Full scorecard results with best batting and bowling figures.
- Other staff (Physio, Groundkeeper, Scout) can be hired and fired .
- Annual league fixtures listing. Current week and last league results.
- View current cup competition draws and historic records.
- Real time transfer market. Player contract and wage negotiations.
- Sponsors, Printer access, Finances, Poor ground fines,
- 15 Options to alter game preferences, Load/Save game.
- Instruction book with plenty of examples.
- Plus many more fine details that we are unable to list here.





STABLE MASTERS V2



This game has been designed to be as close to real racing as possible. Five years of development by a clever racing expert has led to the second revision of this Flat Horse Racing Simulation. Up to 4 players can participate as Owner Trainers with the primary objective of becoming the top rated trainer, in respect of prize money won, at the end of each racing season (March to November). There are up to 35 other intelligently controlled computer trainers to compete against and compare your personal performance.

To achieve this aim you must discover a potential champion and train them so that they become capable of competing well and winning any of the 47 big prize money races (Handicap and Group). eg. The Derby

To give you an idea of the tools provided in this game to assist you reaching your objective we have listed the main features below:-

- 250 horses each with over 60 independent variables that effect performance.
- 26 different race courses (2 all weather), real life characteristics mirroring the diversity and uniqueness of racecourses in the UK, descriptions of each are accessible in the game.
- 20 Jockeys who vary in ability and booking fees, Give orders and Receive feedback .
- Formbook and Win Summary Cards cover the previous 200 races.
- Animated race display or just the result. View Declaration List of other horse entries for races.
- Very informative report by Head stable lad. Tipsters. Bookmakers.
- Racecards similar to racing press. Real life. Handicaps & Race Types.
- Viruses, Injuries & Vets. Load/Save game. Many other items included.

Version 1 is available upon request (Simple training & betting) @ £15.

ORACLE Horse Tipster

You could have won £44,836 with this HORSE TIPSTER Utility.

Open National Tipping Competition 1991 : Organised by Racecall, regulated by the Tote, this program achieved joint second. This led to a serious approach from a well known national book maker. Rejected in favour of supporting the public.

Winnings Statistics : 104 wins out of 166, as from 2/6/93 to 1/9/93.

Formula : This program tells you exactly what to do. You can NOT amend our system unlike so many other similar programs. How confident can you be in something that invites amendments!

Research & Development : Three years full time race analysis and experimentation to refine and test the prediction system.

Inside Knowledge : Plenty of unique hints from contacts in the know.

User Friendly : No racing knowledge required, easy to use, tutorial book.

Restricted Sales : As soon as our programs predictions have a prolific impact on the betting odds we will stop accepting new buyers.

Monthly Updates : Highly recommended option. If any update fails to break even we'll send the next one free of charge. From £25.

Price Increase : Highly likely. Buy now before success forces increase.

24 HOUR CREDIT CARD HOT-LINE

(0702) 600557

VISA MasterCard

48 HOUR DISPATCH

CHEQUE PAYMENTS

If you have a guarantee cheque card or credit card please write its number on the reverse of your cheque, doing so will ensure dispatch within 48 hours of receipt.

OUR ADDRESS

ESP Software (STR),
32a Southchurch Road,
Southend-on-Sea,
Essex SS1 2ND. England.
TEL. (0702) 600557
FAX. (0702) 613747

MAIL ORDERS

All the programs detailed in this advert are only available by direct mail.

COMPUTER: ST 512K S/S	ST 512K D/S	ST 1MB	AMIGA 1MB	P.C.	DESCRIPTION STR	PRICE	TOTAL
					Professional Football Masters V4	24.95	
					P.F.M. Editor V4	12.00	
					Stable Masters V2	24.95	
					Oracle Horse Tipster (RRP £99.95)	75.00	
					Cricket Masters	24.95	
					Professional Football Masters V3	19.95	
					Stable Masters V1	15.00	
CREDIT CARD NUMBER & EXPIRY					E.& O. E.	GRAND TOTAL	

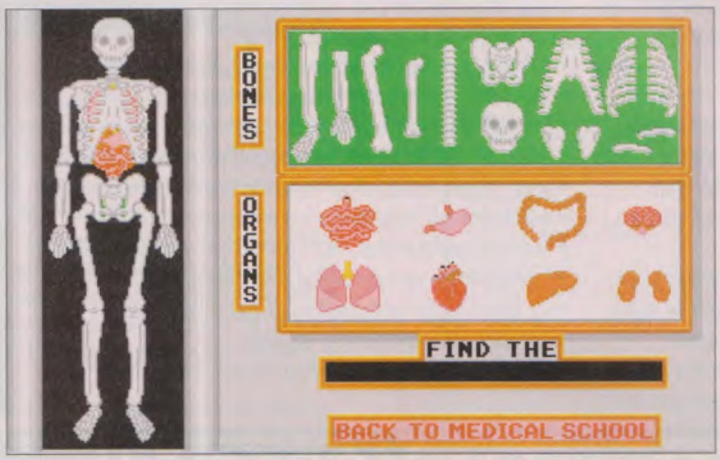
NAME _____ TELEPHONE _____

ADDRESS _____

_____ POSTCODE _____

THE SMART OPTION

With educational programs at a premium, Sharon Aboudara finds a ray of light with Mr. Smart's Big Time...



Body Builder – now where did I put my scapula?

ATARI ST REVIEW ESSENTIAL BUY

It's cold outside and the children are lost for something to do, so how about giving them a good educational game to play on the computer? Regrettably this may prove difficult, for despite the fact that there are perhaps half a million STs in this country alone, many of which are used by parents and children, there is very little educational software available. So how about a program that offers 25 games for children between the ages of 6 and 12?

Mr. Smart's Big Time claims to be "the largest suite of educational programs ever released on the Atari ST/STE" and the wide variety of games will certainly keep the average family occupied for hours at a time. Different modules are aimed at different age groups. As well as the obvious ones, there is also a module to learn positions on a keyboard and one on road signs to prepare for cycling proficiency.

MT Software has set out to produce a program that will give children "education and fun rolled into one!" and includes a video explaining all the games and how to play them. *Big Time* is easy to use; the main screen shows 25 separate modules presented in a five by five grid. Even a young child can access a game with the mouse and return by pressing <F1> to select another module.

EARLY PRIMARY

Telling the time is a skill that adults take for granted but one that children often have problems with. However, help is at hand with the first three modules: *Spoken Clock*, *12 Hour Clock* and *24 Hour Clock* to teach, test and give a running score.

Four of the modules involve finding an answer by matching, three of which are suitable for 6-8 year olds. It's fun to match animal pictures in *Grid Works 1* and *Grid Works 2* using numbers and letters to find the correct grid reference. In *Grid Sums 1* there is a grid of numbers, one of which will be the answer to a sum at the bottom of the page.

A fun way of learning the order of the alphabet is through *Lost Letters*. Using the keyboard, children have to replace the letter hidden by the witch – you need patience to see what becomes of the ruined castle and the ugly witch, but it's a good way to learn the position of letters on the keyboard.

Children like playing shop and they can do so while practising their sums with *Till Plus* and *Till Minus*. The cash register shows "Well done" for the right answer and "No Sale" for the wrong one. Spelling the subject of a picture is the domain of *Picture Spell*. Clues can be requested or a word spelt using the keyboard to type in the answer. The further you play through the 45 words provided, the harder they become...

Word Popups and *Picture Popups* can both be played at three different speeds. Assorted pictures or words appear at the bottom of the screen; when a word or picture pops out of the hat, the mouse is used to match it to those at the foot of the screen.

Quick reactions are called for with *Sea Colours* where you have to match the coloured bubble rising from the open clam with the word at the bottom of the screen. Every correct answer wins a white pearl while a wrong one gets a black pearl. The object is to try to complete three strings of white pearls – and then try it at a faster speed!

Shape Match is like a jigsaw puzzle where someone throws away a piece every time you make a mistake. You only get one chance to put each piece in the right place. Complete the picture and a second one appears – challenging for any age, but even young puzzle enthusiasts can manage this if they take their time.

The centre of the screen fills with 16 shadows for *Shadow Master*. The object is to choose which shadow matches each of the pictures around the outer edge of the screen. When



Good match – Grid Work 2 has the young ones matching pictures.



Ready to go – now I know where the UK is, I'm ready for the test in Country Wide!



Looney toons – cartoon animals are most appealing as Number friends shows.

COVER DISK

EXCLUSIVE!

To give you a taste of *Big Time*, MT Software have provided *ST Review* with an exclusive demo containing six of the 25 modules; *12 Hour Clock, Grid Work 1, Word Popups, Sea Shapes, Country Wide* and *City Slicker*.

Open the BIG_TIME folder and double-click on BIG_TIME.PRG. On the main screen you'll see the five by five grid. The active modules are those in green; click on any one of these to go to that particular module. To return to the main screen, press the <F1> key.

all 16 shadows are matched, a second screen appears with shadows of abstract shapes – time to ask big brother for help!

Number Friends is a kind of treasure hunt. Move around the screen by reading instructions and finding the hidden answers to sums in the woodland picture but beware; one mistake and you are back at the beginning of the game.

LATE PRIMARY

What is so enjoyable about *Big Time* is the flexibility that allows so many of the modules to appeal to children of different ages. *Spoken Clock* may be rather basic for an eight year old, yet *24 Hour Clock* is quite thought-provoking.

Brothers and sisters of all ages can derive equal enjoyment from many of the early primary games. In addition, there's *Grid Sums 2* which is similar to the other grid games but made harder by having to find which sum in the grid matches the answer at the bottom of the screen.

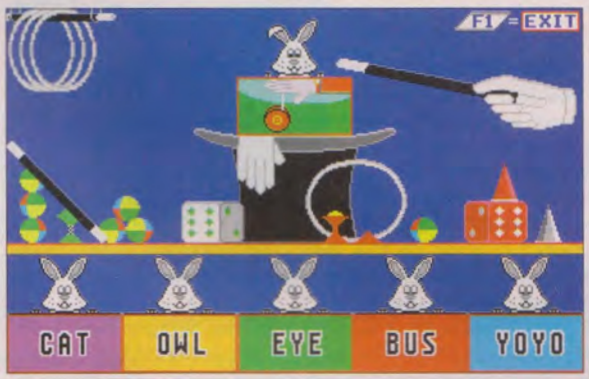
Having played *Word Popup* and *Picture Popup*, older children will be ready for *Word Memory* and *Picture Memory*. These are similar but this time you have to find where the word or picture is hidden. The harder the level, the less time available to memorise the positions of the hidden objects.

Sea Shapes is similar to *Sea Colours*, but much harder to play with the clams releasing five shapes instead of colours, and a helpful game for anyone taking cycling proficiency is *Street Wise*. The lesson section teaches the road signs while the test makes you match the signs to their meanings.

SECONDARY SCHOOL

Big Time includes a few modules for specific subjects. Biology students can test their knowledge of the parts of the body with *Body Builder* – answers like skull, spine and lower leg are fine for the easy level but you need to know the difference between tibia and fibia to score full marks and complete the body on the harder level.

Geography has three dedicated games covering European flags, countries and cities. The position of Paris may be obvious, but could you place all the eastern European countries and their capitals correctly on a map? And have you ever noticed how similar flags look when you are presented with so many of them together...



Picture Popups – "err, what's up Doc?"

THUMBS UP

Trying *Big Time* with a group of children of differing ages and interests proved one thing; it certainly holds their interest. The Popup games were particularly popular, as were *Sea Colours* and *Shapes*. Older children (and parents) liked the challenge of *Street Wise, Body Builder, Up the Pole, Country Wide* and *City Slicker*. In fact, many were so confident that they launched straight into the tests without using the lesson part of the game.

The most refreshing feature of *Big Time* is that children can chop and change between maths or geography, serious and fun activities without being restricted by preconceived ideas as to which game is intended for their age.

Mr. Smart's Big Time is lively and fun to use as well as helping children practice all manner of school skills. The screens are bright and colourful with lots of cartoon animals, making the whole program most appealing. The only real shortcoming is the lack of "incentive" style games where, for instance, a child might complete a module and then get, perhaps, a maze game. Ignoring the poor information sheet – which you don't need to look at anyway due to the intuitive nature of the program – my advice is simple. Buy it!

CUTTING CORNERS

The old adage that you can't judge a book by its cover was never more true than with *Big Time*. The makeup of the A4 information sheet is very amateurish as is the printing of the video cover, but the STOS programming is of the highest order. And so it should be; after all, this is the company that bought you *The Beginner's Guide To STOS BASIC*.

Why cut costs in this manner? *Noddy's Playtime*, reviewed in issue 12, had a research budget of £25,000 which was never recovered from sales. The result? The second Noddy program is only appearing on PC and Amiga. So you have a choice; a great product in cheap wrapping or the virtual death of all educational programs on the ST. I know which option I prefer...



Lost Letters – one up to the wizard in the quest to reach the ruined castle.

PROS AND CONS

- ✓ Colourful and lively
- ✓ Easy to use
- ✓ Suitable for children of all ages

- ✗ Not every game gives a score
- ✗ Some games do not correct mistakes

"A versatile program that can be enjoyed by the whole family."

NAME: MR. SMART'S BIG TIME
COMPANY: MT SOFTWARE
CONTACT: 0983 756056
PRICE: £24.95
MIN MEMORY: 0.5MB

EASE OF USE	★★★★★
DOCUMENTATION	★★★★½
EFFECTIVENESS	★★★★½
VALUE FOR MONEY	★★★★★

OVERALL 90%

IN PUBLIC

Bouquets and brickbats...



From a reader's point of view, the life of a software critic must looked charmed, but along with all the freebies comes a certain responsibility. Every time an opinion is expressed within a review a journalist puts his neck on the line, and covering some forty pieces of software every month in *PD Zone*, I find myself with a slightly bigger "line" than most.

This has been highlighted by some of the letters that have been arriving at the *ST Review* offices in recent times. Along with all the kind comments (thank you people – the cheques are in the post) come the inevitable criticisms. I've been contacted by everybody from disgruntled programmers to irate fishermen (it's a long story) over the months and all had one thing in common – a puritanical dislike for the opinions expressed in my reviews.

So what are the criteria for a good piece of PD software? Does it have to be more powerful than anything available commercially or, perhaps, unbelievably intuitive? Of course not! Reviews are based on a ratio between innovation, power and the other PD programs available at the time, just like commercial software. After all, if a graphics conversion utility landed on the market offering only half the features of *GEMView* at the same price, which would you choose? The same goes for communications programs, art packages and utilities.

When it comes to entertainment software, the issue is much more clear-cut – games should be playable, period. It's inevitable that some will appeal to certain people more than others, but does that necessarily mean that they have to be boring to play? Not likely, as games like *Leaderboard* prove. Surely if an angling simulator should be enjoyed only by fishermen, then all *Streetfighter 2* players should be unprincipled renegades!

There are superlative packages in the public domain and there are disastrous packages in the public domain – you'll find plenty in between as well. For too long the attitude has been "well it's low on features and and it crashes constantly but that's OK because it's PD". As I'm sure you agree, it wouldn't be fair to rate average packages alongside the cream, although I do try to be objective...

***ST Review* has a strict policy of editorial honesty and you can be sure that the reviews you read convey the journalist's exact feelings on a piece of software. Sure, I – like everybody else – will get it wrong every now and again, but rather that than produce sterilised reviews which read along the lines of a press release. Keep the letters coming and... oh, please excuse me I feel a 'phone call from "irate of Inverness" coming on!**

See you next month...

Nial Grimes is is a shy, retiring freelance journalist who faces a constant battle in expressing his true opinion on software. He enjoys nothing more than donning a pair of green waders and spending an afternoon getting soaked to the skin on a muddy riverbank in the middle of Wales. Or something like that...

WHAT MAKES WIZARD SO SPECIAL?

We wish all our customers a Happy New Year

FULL DOUBLE SIDED DISKS
Compare our Contents with other Suppliers & see who's the best for Value

FAST SERVICE, RELIABLE, TOP QUALITY
(we only use the best)

JUST A FEW EXAMPLE DISKS FROM OUR COLLECTION.
WE HAVE OVER 1,000 MORE DISKS TO CHOOSE FROM, ALL JUST AS FULL

BUDGIE CLASSIC RELEASES

LIC12 Ace Invaders
LIC37 Mr Dig
LIC104 JetPac
LIC30 Quest for Galaxia (Galaxiums)
LIC70 Pacman St

ARC04 TETRIS, superb Tetris game. KLAX TRIX, WELTRIS & TETSIDE, 3 more good games on the Tetris theme. MR DICE, COLLAPSE & BURGER, 3 more good games to fill this super value disk.

ARC12 BELUM INTERACTUM – Good galaxians clone. BLOCKADE. HAUNTED HOUSE. AMORTRACK. BOING. INVADERS. MANIA. Another superb selection of arcade games.

ARC 14 HOME, and L'ORB 2 super pinball games. GALTIC RANGER, unusual shoot em up. MONKIES & BALLOONS, bounce the clown and burst the balloons. FIRESTORM, another good arcade game rescue the humans. LAZERBAL, super game and interesting version on the pinball theme. Also on this disk LOST TREASURE, WIDOW MAKER, SLALOM & BREAK OUT.

ARC 20 BLAT. Superb STE ONLY falling blocks game, 10 fun filled levels. Superb DMA sound, will work with 512k but is a real treat on 1Mb machine. Great graphics.

ARC37 LLAMATRON and REVENGE OF THE MUTANT CAMELS. 2 superb games from Jeff Minter. These are a must for any game collection.

ARC43/44 PSYCHOPIG 2. 2 Disks at 1mg only £2.50.

ARC53 REBOUND. Super bat and ball game from DCS. 1mg only.

WPR01 ST WRITER V4.2 and FIRSTWORD. The best word processors for the ST(E) plus a spell checker, print spooler and a selection of ready to use letters.

WPR03 ALICE. Super text editor up to 10 docs. In memory at once. EDITEXT. Super little text editor. Ideal for beginners. NEWORD 400v3. Easy to use text editor, again good for beginners. NOTEPAD. Make temporary notes from within any gem program. PHONEPAD. Pop up telephone book. FILOFAX and ORGANISER. Everything a paper filofax would have and much more in these two programm. TYPEWRITE – Turn your ST into a typewriter.

WPR 09 LEXICON. A pure word list containing 46,209 words without slang, americanisms or other rubbish. Needs 1Mb to run with SPELLONE (spellchecker) also provided on this disk.

BRD01 MONOPOLY, LAZER-CHESS, OTHELLO, CHECKERS, WHEEL OF FORTUNE and more. A superb collection of BOARD GAMES.

BRD 04 CHESS, superb chess game. DECODER, excellent mastermind. SUPER SIMON, computer version of hand held game. DOMINOES, puzzle game. GOLF card game. Also on this disk DRAGON MAZE, 2 game, SENSORI BACKGAMMON, BRIDGIT, ST ARTREK, BATTLESHIPS.

BRD05 AMERICAN FOOTBALL. DALEKS. STARTREK. DELTA 3. CELESTIAL CEASERS (versions 1 and 2). SPACE WARS. RED ALERT. MATCH. HANOI. OGRE. 11 Board and Strategy Games. SPLENDID SELECTION!!

BRD09 MILE Excellent board game. D FISSION. Super Othello type game. TUNNEL VISION Excellent maze game. 3 jigsaw puzzle games. ST TIC TAC TOE, HIGH-LOW, BLACKJACK and more on this disk.

BRD 16 COURSE FISHERMAN. Superb treat for any angler. Needs 1 Mb to run. 12 different venues. Whole host of variations in tackle. A great way to while away the hours when you can't get to the bank.

ADV 01 DDST, DUNGEONS & DRAGONS, Role playing adventure. PARANOIA, ENCHANTED REALM and ELBOZO CITY. 3 more good adventures also on this disk.

ADV 27 FATEMASTER. Fantasy graphic adventure.

AST 01 PLANETARIUM simply the best PD Astronomy program. SKYMAP another great Astronomy program plus aSTronomer.

ODD07 THE WORLD OF STARTREK. Over 300K of text interviews and biographies from the original STARTREK and NEXT GENERATION plus loads of pictures from both series. A must for all TREKKIES!!!

ART 07 Superb art package, ideal for simple DTP. 23 built-in fonts. A4 size paper works in monochrome for best quality of print. Ideal for leaflets etc. DS Disk.

UTL134 SAGROTAN. Must be the best virus killer around. V.KILLER v3.84. Another excellent virus killer. EXORCIST. The latest version of this V.Killer. HD RESTORE. Repairs hard drive boot sector. RIPPER and PROBE. Two programs to grab music and graphics from disks and more...

UTL144 ZX SPECTRUM EMULATOR. Needs 1Mb SPECTRUM to ST DOWNLOADER. Gives details on how to transfer Spectrum games from tape to disk for the above emulator. 10 pieces of Spectrum software.

SUNDRIES	
Dustcovers	£3.50
Mouse & Joystick extenders	£4.75
Mouse Mats	£3.50
10 blank disks inc. labels	£5

We also have a selection of 46 commercial games at under £3.00 each

EST. 1989
WIZARD P.D.
178 Waverley Rd, Reading, Berks, RG3 2PZ Tel: 0734 574685

24 HOUR ORDERLINE 9am - 9pm Human 9pm - 9am Answerphone Monday - Friday
WE ARE NOW OPEN SATURDAY 9am - 12 noon

For disk catalogue send blank + SAE OR 70p

Catalogue FREE with order on request

P.D. Disks.....£1.75
Budgie Disks.....£2.75

50p postage + packaging on all orders under £10

NEXT MONTH

PRACTICE MAKES PERFECT...

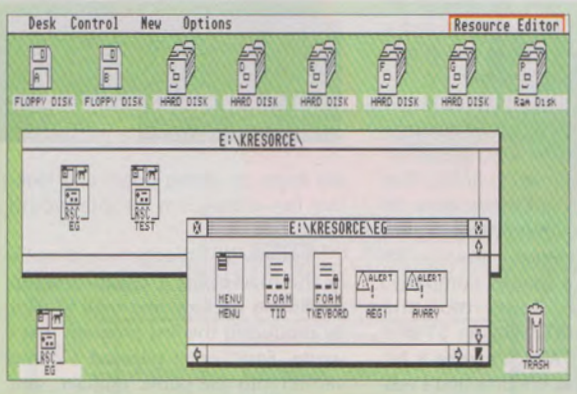
... the ST Review way!

Next month, *ST Review* will look at working with every practical aspect of your ST and Falcon – painting, graphics, sequencing, video, sampling and DTP. We'll tell you what you can *really* achieve with your programs!

There'll also be a superb feature on retouching photographs which will finally answer the question of whether the Falcon really is capable of professional results!

SUPER COVER DISK

As usual, ST Review brings you the best in cover disk programs! Next month includes K-Resource 2.4, a commercial programming utility for use with both our HiSoft BASIC and Prospero C tutorials, and an excellent shareware vector art package, both exclusive to ST Review. And we'll include as many shareware and PD utilities as our disk will hold!



K-Resource, an excellent commercial utility.

ST REVIEW OFFERS YOU THE BEST...

- Reviews – by the finest writers
- Advice – from real experts
- Features – that cover all tastes
- Tutorials – at the right level

ST REVIEW IS THE ESSENTIAL READ FOR ALL ST AND FALCON OWNERS – NO OTHER ST MAGAZINE GIVES BETTER EDITORIAL COVERAGE!

ON SALE FEBRUARY 3 – PLACE YOUR ORDER NOW!

Hot on the heels of the release of Easy Text Professional Vector, Vic Lennard heads North in search of zzSoft...

SOFTLY, SOFTLY!

Back in the halcyon days of Summer 1989, many small manufacturers sprang up at a time when the ST was at its peak. An avalanche of products appeared over a relatively short space of time and among these was the first budget desktop publisher, *Easy Text*, courtesy of zzSoft.

Roger Pearson *is* zzSoft. Now based in Clayton-Le-Moors, Lancashire, I enquired how the name had originated. "I thought it would be easy for people to find it on advertisers' lists. Even so, I've had a few cheques made out to xxSoft and *Easy Text Plus*!" laughs Roger.

Self-employed by nature, Roger started out in the world of computing in 1981 with an Oric Atmos on which he programmed in BASIC. This was followed by a Commodore 64 and an abortive attempt to program some background music in Assembler for a games company. Then, in 1987, Roger took the plunge with an ST. Why an ST and not an Amiga? "Amiga's were a bit more expensive at the time and I was impressed with the enthusiasm of Atari owners."

THE START OF ZZSOFT

Despite the knowledge gained from programming the Commodore 64's 6802 chip in Assembler, Roger tried *Haba C* before moving, rather quickly, onto *DevPac*. A wrong turning of trying to write an Accounts package led Roger to sitting down and looking for a program people would want.



Sitting comfortably – Roger Pearson, the man behind zzSoft.

"I saw what I thought was a niche in the market for a cheap desktop publishing package and tried to fill it by producing the first program that I wrote, *Easy Text*. I released a demo version into the public domain, sent it out to 80 PD libraries and sat back waiting for the orders. Nothing happened! I sent it to the magazines but they ignored it.

"Four months later, a reviewer in the ST section of *PCW* magazine wrote that 'a DTP package has just landed on my desk and it's great! And best of all, it's *free*...'. I suddenly realised that this was my program and as my telephone number was in there, the 'phone didn't stop ringing for three days. Once I explained to each caller that the PD demo was free but that the actual program cost £15, I sold a couple of hundred." Roger explains. "It was completely unexpected. The original manual was printed on a nine-pin printer – all I had was a single-sided disk drive with an external double and a mono monitor. The ST crashed every time the fridge turned on due to a faulty power supply!"

Easy Text was programmed completely in Assembler and the print routine simply carried out a screen dump to a sheet of A4. However a number of passes could be made, so giving reasonable print quality, and various special effects were also included, making the program good value for money.

A DISTINCT PLUS

The success of *Easy Text* convinced Roger that he was on the right track but, equally, he was acutely aware of the program's shortcomings, especially on the printing side. On the other hand, there was little point including all the bells and whistles of more powerful packages and losing the ease-of-use tag. "Programs like *Calamus* have a long list of features including kerning and leading," says Roger, "but how many people actually *use* such features?

"I realised that what was needed was a program that could use GDOS. The surprise to me was that I had to licence GDOS – it cost me £350, and I think that Atari were very surprised when they got the cheque!"

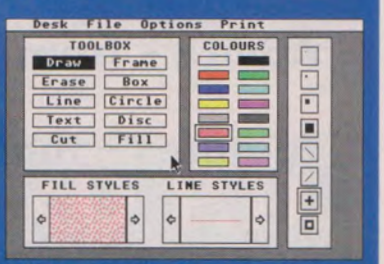
Easy Text Plus appeared in December 1990 and was an immediate success. It made number seven in the Dutch software charts where ACM translated the manual and



Money talks – the original, budget Easy Text Plus manual and the latest ring-bound Vector version.

IMPRINT

Sean Hodgson, co-author of *Introducing Atari ST Machine Code* realised that the market needed a decent printing program that could resize, edit and output pictures to both mono and colour 9-pin printers. *IMPrint* was the result of such thought and through his association with Roger, the program was marketed by zzSoft.



Printing utility – IMPrint's Selection screen gives an inkling of the program's power.

As a budget program, *IMPrint* is an unsung hero. It handles Degas and Neochrome files and incorporates various useful editing features such as lines, fills, frames and basic shapes. Taken purely as a colour screen dumper, it was worth its weight in gold back in 1990 when it was first released.

resource file, marketed the product and paid zzSoft a licence fee per copy sold. "The guy in Holland said 'I don't think it will sell very well because there are so many bootlegs of *Calamus*' and it ended up selling thousands!" chuckles Roger. In fact, the program sold over 7,000 copies worldwide.

Among its many advantages were the ability to run on a 520ST with a single-sided drive – and without the need for much disk swapping as *Easy Text Plus* does not use overlays.

THE PROFESSIONAL TOUCH

After collaborating with Sean Hodgson on the *Introduction to Atari ST Machine Code* (see separate box), the pair decided to completely rewrite *Easy Text Plus*. One of the major problems of programming in Assembler is the inability to easily debug a program, and various quirks in *Easy Text Plus* convinced Roger that a rewrite was the correct course of action.

A little known fact is that *Easy Text Professional* was written in *GFA BASIC*, although the more time-dependent routines are programmed in Assembler again. Roger enlarges: "If you want to display a bit image on-screen within a frame and that frame can be any size, using *GFA BASIC* results in painfully slow screen redraws. In Assembler the redraw is almost immediate."

Launched in Summer 1992, *Easy Text Professional* hit a major snag – cover disk fever on the ST magazines. "The two worst things that happened from a business point of view were *Write ON* and *Timeworks* appearing on cover disks. It led to people believing they could hang about and wait for programs to appear on a cover. 'If I wait long enough, someone will give it away' was the message I got back." says Roger ruefully.

Easy Text Professional was based on Roger and Sean's experiences with DTP on *Calamus* and *Timeworks*. The graphics side was vastly improved; while *Easy Text Plus* could only import .PI3 graphics files, the Pro version added support for .TNY, .IMG and .DOO files. Pictures could be rescaled and optimised for individual printers to reduce the risk of extraneous background patterning. Icon-driven toolbox, better import facilities, on-screen editing... the list was most impressive.

Then along came vector fonts...

TO THE PRESENT

The launch of *FSMGDOS* led to a futile attempt to incorporate it within *Easy Text Professional*. "For instance, if I wanted an 80 point character, it would crash. *FSMGDOS* was very poor and after a bit of programming I realised that it was hopeless." clarifies Roger.

"When *SpeedoGDOS* came out, I put in the hard drive, tried to do a few things with it – and it worked! *Easy Text Professional* didn't need a lot of altering to work with *SpeedoGDOS* although it took a while to rewrite the affected parts of the program. The result is quality text at any size."

Roger wrote to Atari requesting a licence for *SpeedoGDOS*. When the application form finally arrived, a prerequisite was the buying of 50 copies at around $20 per copy. Rather than go down such a path, Roger decided to let *Easy Text Professional Vector* owners buy their own copy of *SpeedoGDOS* and whichever Speedo fonts they required. A full review of the new program is on page 14 in this issue.

AND THE FUTURE

One project currently underway is a font editor to convert Calamus fonts to Speedo format, especially useful as there are thousands of PD Calamus fonts available.

As for the future of zzSoft in the Atari market, Roger sums up his feelings. "The Atari is like a first love. I have great respect for the ST and the people using it – it's a great machine. But at the end of the day, irrespective of how much I love it, it has to make a living. I will probably improve *Vector*, but it all depends on public demand..."

zzSoft: a perfect example of an oak growing from a pile of small acorns – or should that be STs...

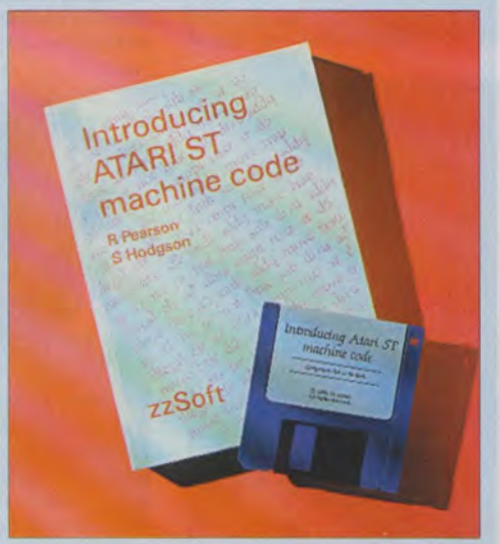
PROGRAMMING IN ASSEMBLER

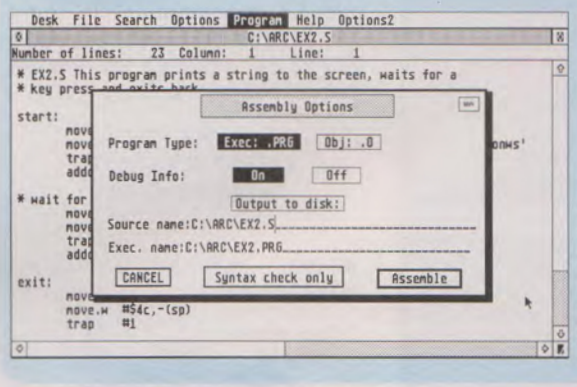
After writing *Easy Text*, Roger became aware that there was very scant information on programming in Assembler. Through his practical experience of working with the Commodore 64's 6502 chip, he teamed up with Sean Hodgson and wrote *Introducing Atari ST Machine Code*.

"I realised that what the average programmer needed was an Assembler resource construction kit, a disassembler... a complete package if you like. With this, somebody could get started into programming." rationalises Roger.

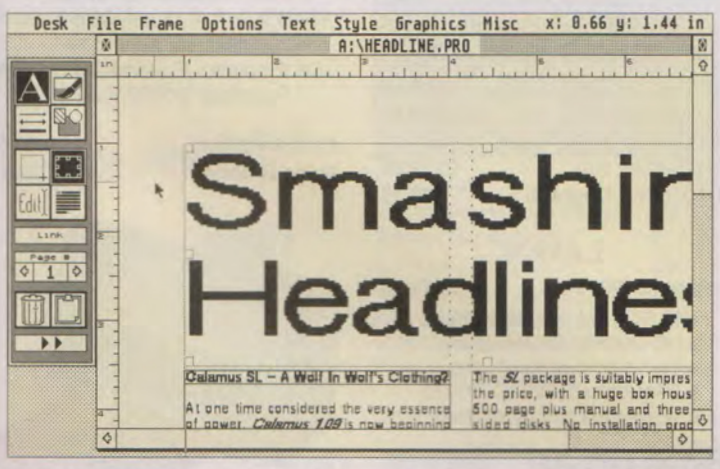
While writing the book, Roger hit a snag when he reached the chapter on "How to write drop-down menus in Assembler" – he couldn't remember how to! Even a search through the original source code for *Easy Text* failed to jog his memory. By chance, he happened to log onto the Lancaster University BBS and find a resource construction kit, and a public domain one at that. A swift telephone call to the programmer in Canada led to the program being included on the disk with the book which then retailed at £20 including the disk.

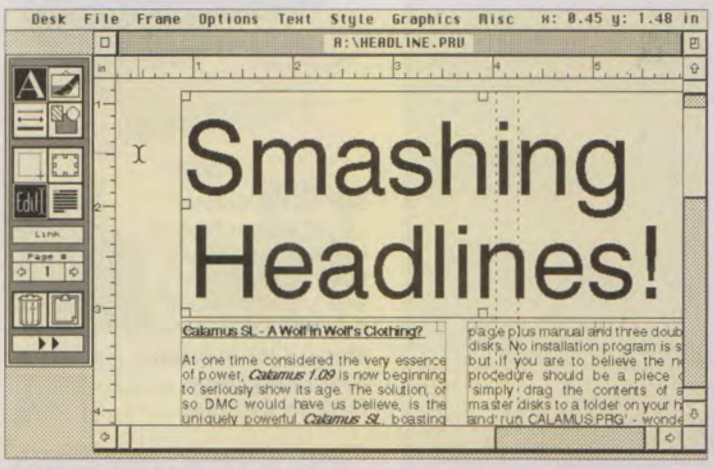
Pure code – the 400 page book and disk contain a complete guide to Assembler programming.





Bug free – the disk includes a debugger and resource construction kit.





Different strokes – the joy of using vector fonts and SpeedoGDOS (right) instead of GDOS and its bitmapped equivalents...

Cadbroke Computing

33 Ormskirk Road
Preston, Lancs
PR1 2QP

Hard Drives

Monitors & Scart TV's

Printers

Telephone:
(0772) 203166
Fax:
(0772) 561071

Data Pulse Plus



The Data Pulse Plus range of drives features a custom designed case with integral PSU. The metal case is ideal for use as a a monitor stand.

All Data Pulse Plus Drives now come configured with industry standard 50 way SCSI Centronics plugs which allows connection of the ICD LINK for use on the ST or a SCSI II cable for use on the Falcon etc.

To ensure the highest possible reliability, the drives are tested at every stage of assembly by skilled technicians.

All drives are ready to 'Plug in and Go' when you receive them. When you first boot up your hard drive you will find a wealth of Public Domain Utilities which have been selected by our support staff.

All Data Pulse Plus Drives include 12 months warranty and free phone advice and support by genuine Data Pulse Plus users.

The low power consumption of these Autoparking Autobooting mechanisms means that they can operate well within their safe operational temperature ranges without the need for fan cooling. This coupled with the design of the case results in probably the quietest Hard Drive range available for the ST.

Floptical drives are a reliable, high density, replacement media drive for the ST or Falcon. Due to an optical positioning system the Floptical drive is capable of storing 21Mb of data on one 3.5" Floptical disk. The drive can also read/write 720K and 1.44Mb HD disks.

Re-Writeable Optical drives are a new addition to the Datapulse range, offering staggering density with hard drive speed. Each 3.5" optical disk stores 128Mb with access time of 30ms and a data transfer rate of 600K per second.

"Data Pulse is astonishingly fast"– Andrew Wright, ST User

Data Pulse +52Mb	**£160.00**
Data Pulse +127Mb	**£210.00**
Data Pulse +170Mb	**£280.00**
Data Pulse +213Mb	**£330.00**
Data Pulse +540Mb	**£610.00**
Data Pulse +1Gb	**£1080.00**
D/P +21Mb Floptical	**£310.00**
170Mb with Floptical	**£590.00**
D/P +128Mb Optical	**£710.00**

Please note all prices quoted are for main drive unit only. Add ICD LINK for use with ST or SCSI cable for use with FALCON

ICD LINK (ST)	**£89.99**
SCSI Cable (Falcon)	**£39.99**

Free HD Turbo Kit



Dataview Mono ST £139.99
The Dataview Monochrome monitor comes complete with our custom designed adaptor. The adaptor incorporates a small beeper and also a 2.5mm output for better sound reproduction. The monitor/adaptor combination is fully compatible with all ST high resolution programmes and includes a tilt/swivel stand.

PHONE FOR LATEST DETAILS ON SCART INPUT TV'S



Star

Star LC100 Colour	**£149.99**
LC100 Colour Ribbon	**£7.00**
LC100 Mono Ribbon	**£5.00**
LC20 Ribbon	**£5.00**
Star LC24/100 Mono	**£179.00**
New Star LC2430 Colour	**£249.99**
Starjet SJ48 Bubblejet	**£210.00**
SJ48 Sheet Feeder	**£55.00**
SJ48 Ink Cartridge	**£19.00**

Phone for extended warranties on Star printers. Add £3 for cable. Add £7 for next working day delivery.

Multisync Monitor

Microvitec 1440	**£399.99**
ST Switch Box	**£29.99**
Falcon VGA adaptor	**£9.99**

The Microvitec 1440 is a multisync monitor compatible with both the Atari ST and the Falcon. Utilising the ST switch box it is possible to display all three ST resolutions on the same monitor. Also compatible with screen blaster for the Falcon.

"Microvitec 1440...Highly recommended"–Atari ST User

Dataview .28 SVGA £239.99
This high quality SVGA colour monitor comes complete with Falcon adaptor. The .28 dot pitch gives the highest quality picture (Falcon will only display 256 colours in high resolutions).

8833 MkII STE cable	**£9.99**
8833 MkII STFM cable	**£9.99**
SCART STE cable	**£9.99**
SCART STFM cable	**£9.99**

Citizen

Citizen Swift 240 Colour	**£270.00**
Citizen Project Inkjet	**£209.00**
Swift 9 Black Ribbon	**£5.00**
Swift 24 Black Ribbon	**£8.00**
Swift 24 Colour Ribbon	**£14.00**

Hewlett Packard

HP Deskjet 500 Colour	**£299.99**
HP Deskjet 510	**£299.00**
HP Deskjet 550 Colour	**£579.00**
HP Deskjet 310	**£239.99**
310 Colour Upgrade	**£28.99**

Lasers

Seikosha OP104 £549.00

- 512K RAM (Exp to 2.5Mb)
- HP Laserjet IIP emulation
- 14 resident fonts
- Centronics/RS232C/RS422
- 12 months on site warranty

Ricoh LP1200 £699.00

Add £3 for Centronics cable and £7 for next working day courier delivery

Scart TV's

Samsung C15322X £249.99
The Samsung C15322X is a 20" TV with SCART input for high quality display of computer output. It also features remote control, on screen displays, Auto tuning system (requires SCART lead).

Samsung C13352X £179.99
The Samsung C13352X is a 14" SCART input TV with remote control and on-screen displays (requires SCART lead).



Star

Star SJ144 £549.99
The Star SJ144 is a Colour/Mono thermal wax transfer printer which gives glossy colour output on normal paper.

- 144 element print head
  - Mono 3 pages per minute
  - Colour 1.4 pages per minute
  - 360 dpi resolution
  - Emulates Epson LQ 860, IBM Proprinter & NEC graphics

Colour Ribbon	**£12.00**
Mono Ribbon	**£10.00**



Falcon 030

- 16MHz 32 bit 68030 Central Processor, 16MHz Blitter, 32MHz 56001 Digital Signal Processor
- 1.44Mb 3.5" Floppy, up to 14Mb RAM. Displays 65536 colours from 262144 palette at 768 x 480 resolution
- 8 Channel 16 bit, high quality. Stereo sound sampling

FALCON 1Mb RAM No HD	£499.00
FALCON 4Mb No HD	£699.00
FALCON 4Mb 64Mb HD	£799.00
FALCON 4Mb 127Mb HD	£899.00
FALCON 4Mb 209Mb HD	£999.00

New Low Prices

STE Packs

1Mb 520 STE	£199.99
2Mb STE	£269.99
4Mb STE	£329.99

3.5" External Drive

Zydec 3.5" External Floppy drive. Includes own external power supply.

£59.99

Speed Mouse

High quality 300 dpi mouse with microswitched buttons ST/AM.

£11.99

Marpet Upgrades

Marpet upgrades for the ST are "plug in" and require no soldering. They are compatible with most motherboard layouts and come with full fitting instructions. These boards accept SIMM boards and are upgradeable at a later date. Please check that MMU and Shifter are "socketed' before ordering.

Unpopulated Marpet Board	£24.00

See SIMM prices below

Forget Me Clock II	£13.99

SIMM Upgrades



512K SIMM's STE	£5.99
2Mb SIMM's STE	£59.99
4Mb SIMM's STE	£119.99
2 x SIPP to SIMM adaptors	£3.00

Software

First Word Plus	£29.99
Scanlite Accessory	£20.00
Silhouette 1.4	£39.99
Intro to WP	£24.99
Timeworks 2	£34.99
Calamus 1.09N	£94.99
CalAssistant	£16.99
Cleanup ST	£24.99
Diamond Back II	£34.99
Diamond Edge	£44.99
Script WP	£69.99

We keep a full range of ST software in stock including Educational, Utilities and Games. Phone for prices and availability

Midistudio Master

240 PPQ Midi Standard file format compatible. 100 tracks. Phrase arrangement. Very easy to use.

£9.99

Repair Services

The Only ATARI Authorised Repair Centre in the UK

Our Atari trained technicians can repair ST's in minimum time at competitive rates. We can arrange for fully insured, courier pickup and return delivery of your machine to ensure its safety. We even have a same day service which will ensure your machine is given priority and subject to fault, completed the same day.

We can fit memory upgrades, PC Emulators, Security devices, ROM upgrades, hard drives to Mega STE's etc.

We offer a Quotation service for £15 for which we will examine your machine and report back with an exact price for repair. If you do not wish to go ahead with the repairs then just pay the £15. However if you do go ahead then the charge is included in the minimum charge.

Please note: The minimum charge covers labour, any extra parts are chargeable.



Quotation	£15.00
Minimum repair charge	£35.25
Same day service	£15.00
STFM(E) PSU	£34.99
1Mb internal drive	£39.99
A/B Boot switch	£4.99
TOS 2.06 + Switch STFM	£65.00
TOS 2.06 + Switch STE	£65.00
Courier Pickup	£11.00
Courier Return	£7.00

Phone for price and availability of ST spares

Modems

2400 Baud Modem	£84.99

2400 Baud, Auto answer, Auto dial, Hayes compatible. Budget introduction to the world of communications.

Supra 2400 Plus	£139.99

2400 Baud, Auto answer, Auto dial, Hayes compatible. MNP error correction, MNP 5 compression.

All Supra modems include 5 years warranty.

Accessories

10 3.5" Bulk Disks	£3.99
50 3.5" Bulk Disks	£17.99
100 3.5" Bulk Disks	£33.99
10 Verbatim Branded Disks	£4.49

All disks come complete with labels. Phone for carriage charges.

100 3.5" Disk Box	£7.99
Mouse/Joystick Switch	£11.99
Roboshift Autoswitch	£19.99
Monitor Switch Box	£19.99
Mouse Mat	£2.00
Mouse/Joystick extension	£4.99
PRO 5000 Joystick	£7.00
Zipstick Joystick	£11.99
Cheetah Bug Joystick	£14.99

Atari Networks



Powernet Network Software

- MultiTasking Network software allows applications to run on the server while drive and printer accesses take place in the background
- Full Falcon compatibility using LanNet device

LanNet with PowerNet	£59.99
MidiNet with PowerNet	£49.99

Prices quoted are for 1 Node. Each computer attached to a Network requires 1 Node.

All prices exclude cabling, LanNet and MidiNet require twisted pair.

PC Emulators



- Run PC Software on your ST
- Full installation instructions
- XT or AT Emulation

PC Speed STFM or STE (XT)	£49.99
AT Speed STFM (8MHz)	£139.00
AT Speed C16 STFM	£199.00

Hand Scanner

- 100,200,300,400 Dpi Resolution
- 1 letter mode, 3 photo modes
- 105mm scanning head
- Includes Cartridge through port with switch box
- Compatible with Touch Up 1.8
- Supplied with Scanlite Accessory. Compatible with any graphics package which supports accessories. Allows scanning directly into compatible packages, such as Silhouette and Megapaint II

Hand Scanner +Scanlite

£99.99

Hand scanner supplied with Silhouette V1.4 Autotracing vector package (mono monitor only). Scan directly into Silhouette via Scanlite or import IMG, DEGAS, TINY, MacPaint, GEM AND SGF bit image files. Exports IMG, GEM (1,3), SGF, DXF, EPS (Postscript) vector files.

Hand Scanner + Scanlite/ Silhouette

£119.99

Phone us for best prices. We will <u>try</u> to beat any advertised price

Ladbroke Computing

33 Ormskirk Rd, Preston, Lancs, PR1 2QP

Ladbroke Computing International are one of the longest established home computer dealers in the U.K. We have developed an extensive customer service policy which involves testing of all hardware prior to despatch to ensure that goods arrive in working order, offering free advice and support over the phone and keeping customers informed. Although our prices are not always the cheapest we do endeavour to offer consistently good service and backup.

All prices and specifications are correct at copy date 13/12/93 (while stocks last), and are subject to change without prior notice. All prices include VAT but exclude delivery.

How to Pay

You can order by mail Cheques/Postal Orders made payable to Ladbroke Computing. Or give your credit card details over the phone.

Delivery

Postal delivery is available on small items under £40 (Normally £3, phone for details). Add £7 for courier delivery. Next working day delivery on mainland UK subject to stock (£20 for Saturday delivery).

Open Mon-Sat 9.30am to 5.00pm. Ladbroke Computing Ltd trading as Ladbroke Computing International.

Fax: (0772) 561071

Tel: 9.00am-5.30pm (5 Lines)

(0772) 203166

ALIVE AND

Is it possible to make a living from DTP on an Atari computer? Bryan Cox thinks so, as Vic Lennard finds out...

Bryan Cox's background is certainly not typical for the average person involved in DTP. After training in graphics and then working as a photographer in the late 1960s, he ended up working for ICI until two years ago when he accepted redundancy.

Bryan's association with Atari computers is as old as the company itself; word processing on a 400 in 1981, then on to an 800 and through to video digitising on a 120XE.



Face to face – Bryan Cox and his TT, the heart of BC Design & Print.

ENTER THE ST

"I bought an ST virtually when they first came out." Bryan reminisces. A short time of working with a TV led to the purchase of an SM125 mono monitor. "That was as big a revelation as the ST itself – I can't over emphasise how important it was. That one bit of kit spurred me on to more serious applications and desktop publishing in particular."

Bryan has never been a hoarder of programs. *1st Word* sufficed as a word processor while *Degas Elite* was *the* art package of the day. "It certainly took up a lot of my time," recalls Bryan, "along with the original *Atari Image Manager* (AIM) program." For the colour side, a Philips CM8833 monitor was added to the equipment list.

What did Bryan have in mind at the outset? "I had very definite views of what I wanted to do: painting and creating images. It was always the graphics side that interested me more than actual desktop publishing."

IN THE EARLY DAYS

With a reasonably modest set-up and, as yet, no DTP package, Bryan still found good use for his equipment. "I typed up stuff for other people using *1st Word*, printed them on my old nine pin printer – an Epson FX80 – and got more work through word of mouth. It wasn't desktop publishing proper until I bought *Calamus*."

Many an Atari owner asked the question "which computer platform?" when the topic of DTP arose, and most saw *Calamus* as the answer. Bryan purchased *Calamus SL* in 1990 along with a 4Mb MegaSTe and was then totally committed to Atari computers. Shortly afterwards, for the sake of the colour capability of *SL* and courtesy of his redundancy payment, a DeskJet 500c colour printer, Eizo multiscan monitor and Crazy Dots card were bought to complete quite an impressive set-up. One particular shortcoming made itself aware almost immediately. While the DeskJet 500c may be a useful printer for working with colour, Bryan soon found out that it could not handle any reasonable size print run and replaced it a few months later with a Ricoh LP1200 laser printer.

Bryan had very clear ideas of what he wanted to achieve: "I fully intended on leaving ICI to make a fortune out of desktop publishing. It was a näive attitude." comments Bryan with a nod of his head. "I went on the TEC course which was very useful. Apart from the £40 per week, it made me further investigate the competition in the area and there seemed to be a niche for DTP. However, it was not as big a niche as I had originally thought and I have always had to supplement the business by working part time at a local community school as an IT Technician."

GETTING WORK

Having talent and a decent set-up is pretty useless unless it is put to good use and Bryan, along with many others in similar situations, found work quite hard to find. "I tried advertising which, as we all know, is not very cost-effective. Then I literally went knocking on doors, something which I've never been happy doing but which you've got to do."

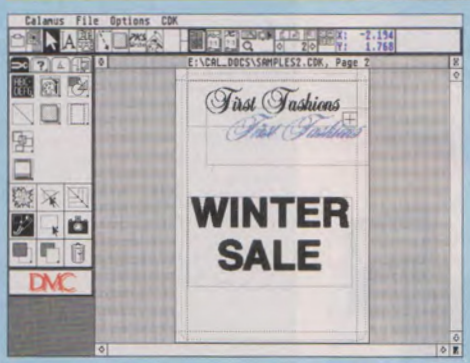
Bryan's good work became noticed. A job designing a cover for a local video company led to others taking an interest and word of mouth soon brought in work that no amount of advertising could ever match.

Various ways of getting work were tried including mailshots and one of these to PD libraries led to Bryan getting involved with Mike Goodman. Print By Design was the result of this, an association of designers, printers

STEP BY STEP

CALAMUS CREATION

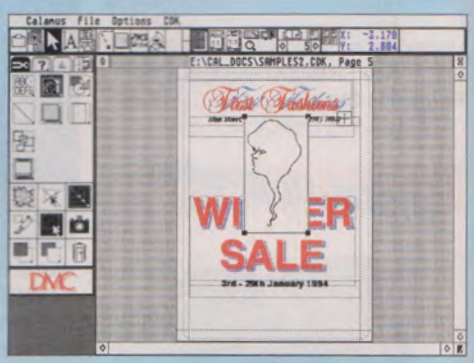
Laying out a colour flyer the BC Design & Print way...



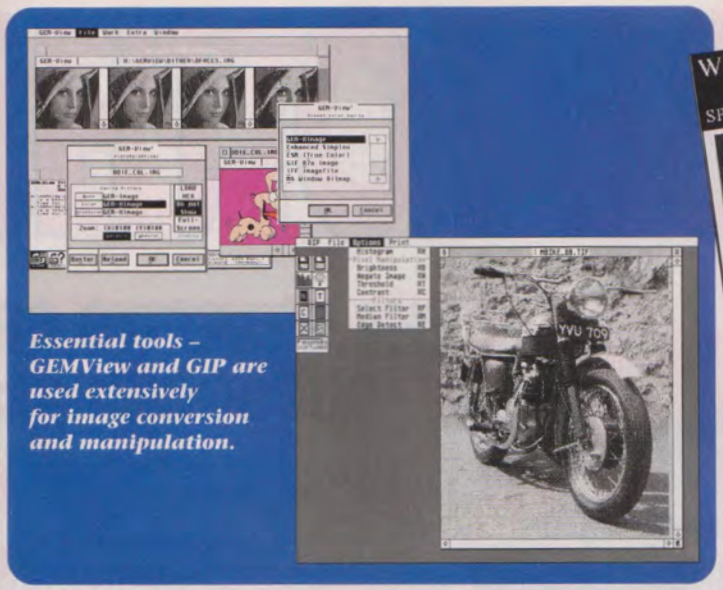
1 ***Position the initial text frames with the relevant text style, colour and size. Enter the text directly, copy the upper frame text, skew it and recolour.***



2 ***Position the skewed version behind the existing text. Colour the "Winter Sale", shadow, outline for added clarity and add the dates beneath. Group all text frames to avoid accidental movement.***



3 ***Using a hand-drawn design based on the client's rough, scan it in mono, import and roughly place in position.***



Essential tools – GEMView and GIP are used extensively for image conversion and manipulation.





In style – two examples showing the professional quality of Bryan's work.

DTP'ING

and typesetters which then secured advantageous printing prices with a local printshop.

Even with such advantages, a plum local job went begging. "A major advertising agency approached me for some typesetting. I went up and saw them and they were very impressed until I mentioned that the system was neither Mac or PC. At that, they lost interest," comments Bryan.

EQUIPMENT UPDATE

With various customers requiring the scanning in of images, an Epson GT-6000 was invested in. This resulted in the creation of large image files and led to considering the processing power of the MegaSTe. "The scanner was in use," remarks Bryan, "the file sizes were horrendous and so a bigger memory and larger storage capacity were becoming vital. The impetus really came when I was laying out a very involved numerical table – pages and pages of figures and the screen redraws became slower and slower. It was taking far too long so I began to investigate other possibilities."

The fact that the MegaSTe's 62Mb hard disk couldn't cope either led to drastic action. A short time ago, Bryan purchased a TT with 12Mb of memory, a 200Mb hard drive, Matrix graphics card and a Protar 17" ProScreen TT. This system can now cope with any day to day typesetting requirements – and as much of Bryan's work comes from short print runs, the Ricoh is likely to be replaced by a LaserJet 4 at some point in the near future.

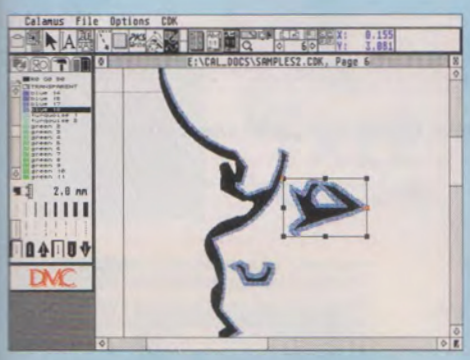
ANY REGRETS?

How successful has BC Design & Print been – can Bryan make a living out of it? "Yes, but only just. I'm looking forward to the time when I can give up the school job although I probably wouldn't want to as I enjoy it immensely. But I am not yet quite at the point where I can keep myself, my family and a roof over my head from desktop publishing alone. I couldn't have started at a worse time. Things are beginning to pick up but whether it's because the recession is easing or the fact that I'm becoming better known is difficult to judge. I'm making a living but not a good one!

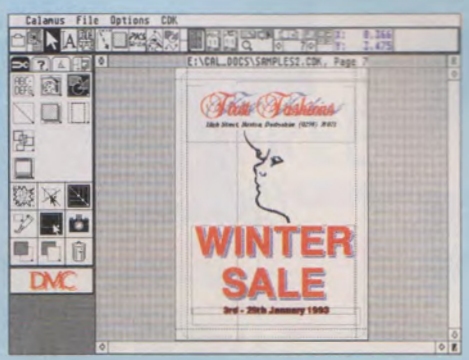
"In the future, I'd like to make greater use of the colour aspects of the kit which, as yet, hasn't been fired in anger to any degree. My level of customer simply doesn't require full colour."

And for all of you prospective DTP'ers out there, Bryan has the following advice: "Establish if there is room for you in your local area and then find out what the customers want. It's quite likely that there is pin money to be made just with letterheads done on a DeskJet, but you're not going to make any real money out of it until you can volume print.

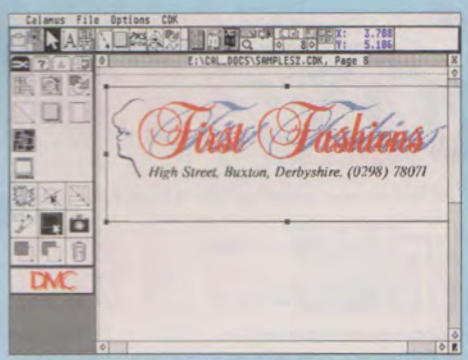
You need to be able to make decent camera-ready copies and take them to a printer – you cannot make a decent living churning things out on a DeskJet or a laser printer.



4 *Having converted the image to vector form via the Speed Line Calamus module, outline it and colour to taste via the Vector Editor.*



5 *Position the final graphic correctly and use white borderless boxes to hide unwanted detail. Place the grouped text frames in the foreground. Save, proof and separate ready for the client!*



6 *Adapt the design for a letterhead. Graphic reduced in size, but there is no noticeable loss in quality due to its vector nature.*

SUBSCRIBE TO THE



THE BENEFITS OF SUBSCRIBING:

- *You now get 13 issues every year for the price of 12*
- *You receive your copy before it is on sale in the newsagents*
- *You hear all the news and reviews before everyone else*
- *Your copy of Atari ST Review is reserved for you personally*
- *Paying by Direct Debit saves you money as well*
- *Your copy is delivered right to your door*
- *You save time and hassle and don't even have to set foot outside*
- *You get to choose any one of our free gifts*

SUBSCRIPTION ORDER FORM

To place your order complete this form (photocopies are acceptable) and send it to: **Europress Subscriptions, FREEPOST (LE6203), Market Harborough, Leicestershire LE16 7BR** or, if paying by Access or Visa, you can fax your order on **0858 434190**.

Name _____

Address _____

_____

_____

Postcode _____ Daytime Phone _____

● Tick which subscription you want:

UK
- ☐ 13 issues at *£41.99* ★
- ☐ 6 issues at *£18.99*
- ☐ Ongoing Quarterly Direct Debit at *£8.99* per quarter ★ (Over a year you get one extra issue)

EEC
- ☐ 13 issues at *£54.99* ★
- ☐ 6 issues at *£26.49*

REST OF WORLD
- ☐ 13 issues at *£54.99*
- ☐ 6 issues at *£26.49*

● If you have chosen a subscription with a ★ beside it now choose any one of the following *free gifts*:

- ☐ Mouse and Mat
- ☐ Two extra issues and binder
- ☐ Zool
- ☐ ImageCopy Colour
- ☐ Universal Item Selector III

● Please start my subscription from the _____ issue of *Atari ST Review* (please enter month)

● I wish to pay £_____ by:

- ☐ Direct Debit (Complete the form on the right. UK only)
- ☐ Credit Charge Card Authority (Complete the form on the right. UK only)
- ☐ Cheque/postal order payable to Europress Enterprise Ltd
- ☐ International Money Order
- ☐ Access/Visa Card Number ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐

Expiry Date ____ /____ Signature _____

Complete this section if you have ticked the Direct Debit of your bank account or credit card option.

Signature _____ Date _____

Complete only one of the sections below

● AUTHORITY TO YOUR BANK/BUILDING SOCIETY TO PAY DIRECT DEBITS QUARTERLY

Name of bank/building society _____

Address _____

_____

_____

Name of account _____

Account No. ☐☐☐☐☐☐☐☐

Sort code ☐☐ ☐☐ ☐☐

● AUTHORITY TO EUROPRESS TO DEBIT YOUR CREDIT CARD QUARTERLY

Credit Card No. ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐

Expiry Date ____ /____

Your instructions to the bank/building society/Europress.

- I instruct you to pay Direct Debits from my account at the request of Europress Ltd
- The amounts are variable and may be debited on various dates.
- No acknowledgement required.
- I understand that Europress may change the amounts and dates only after giving me prior notice.
- I will inform the bank/building society/Europress in writing if I wish to cancel this instruction.
- I understand that if any Direct Debit is paid which breaks the terms of the instruction, the bank/building society/Europress will make a refund.
- Bank/building society/Europress may decline to accept instructions to pay Direct Debit from some types of accounts.

FOR OFFICE USE ONLY Originator's identifications No. 8 5 1 4 1 2

REF NO. _____

☐ Tick this box if you do not wish to receive promotional material from other companies

BEST VALUE GUIDE TO YOUR ATARI ST

Subscribing to Atari ST Review means you reap all the benefits of the exclusive treatment you'll receive as a subscriber, and now you can have 13 issues for the price of 12.

13 issues for the price of 12

So, you're wondering, what exactly is this exclusive treatment? It's a whole range of things that ensure you get your copy of ***Atari ST Review*** without any fuss or effort. As a subscriber there are no worries about remembering when the next issue is on sale. You can watch your favourite soap or have a lie in, because you won't be scrambling down to the newsagents with the rabble. You'll be smug and warm, content in the knowledge that you are part of the select, because your copy of ***Atari ST Review*** is reserved for you personally. Before the masses have even thought about their monthly expedition to the shops you'll have had your copy for a few days, delivered direct to your door, postage free. Not only do you already know the latest news and gossip, but you've also had first pick of the bargains on offer. You can even choose which specific issue you want your subscription to start from. As you know, we now produce an extra issue each year – the Christmas issue. For the same price as 12 (only £41.99 UK) you can now subscribe for 13 issues.



SUBSCRIPTION HOTLINE
0858 410510

CHOOSE ANY ONE OF THESE FREE GIFTS

1 

FREE SAVE £18.99

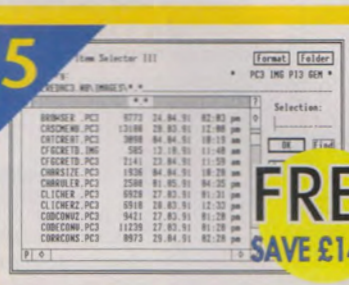
2 



FREE SAVE £10.24

3 
FREE SAVE £25.99

4 
FREE SAVE £14.99

5 

FREE SAVE £14.99

1 **FREE** ALPHA DATA MEGA MOUSE AND LOGIC 3 MOUSE MAT

2 **FREE** ONE EXTRA ISSUE AND AN ATARI ST REVIEW MAGAZINE BINDER

3 **FREE ZOOL**

4 **FREE** IMAGECOPY COLOUR

5 **FREE** UNIVERSAL ITEM SELECTOR

SON OF MUSICOM!

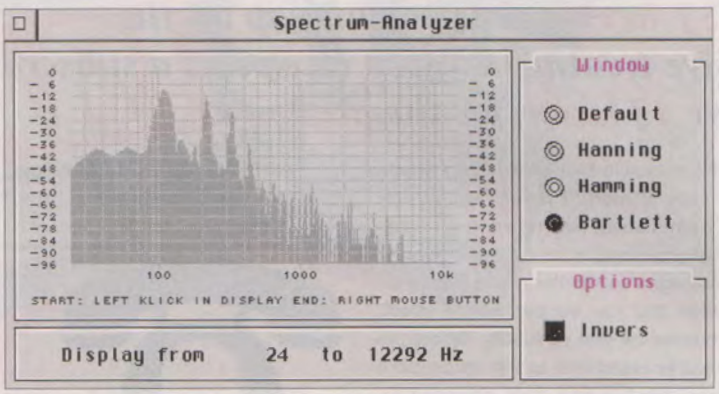
EXCLUSIV

Almost a year after the release of MUSiCOM, Compo are about to release version two. ST Review gets an exclusive preview...

The original *MUSiCOM* was one of the first programs to make use of the Falcon sound system and DSP for budget direct-to-disk recording and even incorporated digital effects. While being reliable and easy to use, it lacked many features available on more expensive packages. Enter *MUSiCOM 2*...

IMPROVED INTERFACE

Version two features a window-based screen, making the program more user-friendly. The main functions are available from the menu bar so allowing access to desk accessories and other programs when running under a multi-tasking system. The Toolbox window opens by default and gives quick 'n' easy access to *MUSiCOM*'s main functions, featuring eight icons for opening the main windows.



The spectrum analyser is most impressive and works very well. The response and speed of drawing is very good, even in colour modes.

OTHER FEATURES

MUSiCOM 2 now includes a jukebox window where you can select several files to be played in succession. Additionally, there's a "playlist" feature where sounds and pauses can be set up to the nearest millisecond or snapped to pre-defined beats – jingle city!

There are also various new settings to use the forthcoming Compo digital input/output interface along with an external clock to generate the industry standard 44.1 and 48kHz sampling rates. Sixteen bit mono recording is supported, in addition to 8-bit and 16-bit stereo,

ROCK 'N' ROLL

The biggest improvement is the inclusion of a sound file editor which replaces the old playback and record dialogue boxes. It features a full tape transport bar with rewind and fast forward buttons while the main part of the window is used to display the current sound file. Other icons are for cut, copy and pasting sections of sounds, looping and zoom in/out for accurate editing. Sections are selected with the mouse by either rubberbanding or by clicking once to mark the start point and clicking again while holding <shift> to mark the end of a section.

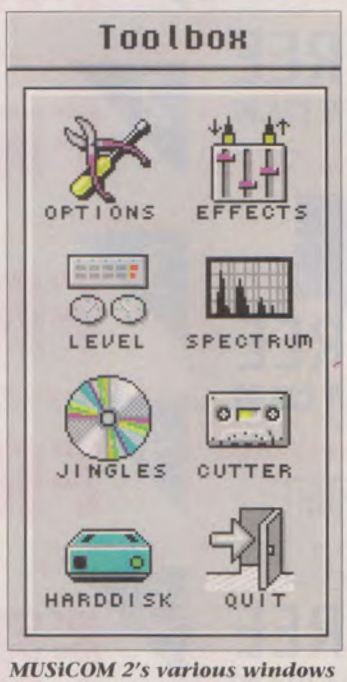
Input and output controls have been totally revised and now include a clever level meter with clip indicators for each channel. At the moment it is not possible to adjust levels while recording or playing back – the "tape" has to be stopped before another window can be accessed and no other function can be used while *MUSiCOM 2* is playing or recording.

EFFECTS

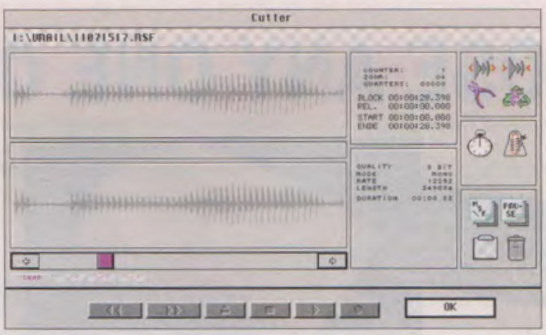
The effects section hasn't changed much. There are five effects to choose from; each can be edited and the effect recorded into the sound file if needed. This way several effects can be stacked on top of each other. The only way to audition an effect is by monitoring incoming sound and adding the effect, although effects can now be added to a block within the editor.

The available effects are karaoke, which attempts to remove the lead vocal from a track, echo, flanger, harmoniser and a graphic equaliser. The latter is probably the best and includes a useful right and left channel link button.

The Spectrum Analyser is a new and impressive feature that lets you analyse the frequency content of incoming sound. Apart from providing enjoyable graphic patterns, the data can be used to asses the sampling rate that is required to faithfully reproduce what you intend to record. The display is remarkably fast, even when running in colour.



MUSiCOM 2's various windows can be accessed via the menu bar or from the Toolbox window.

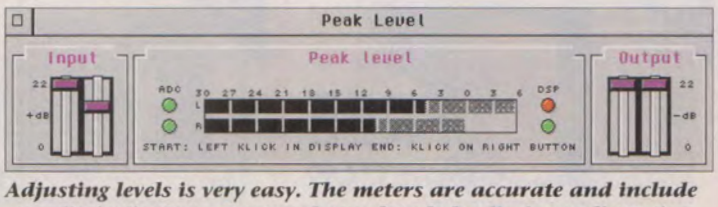


A sample editor lets you cut and paste sound segments and provides basic looping facilities.

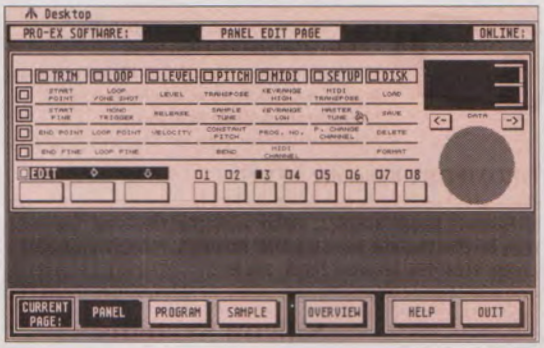
and a .TTP program is included for converting AVR samples to *MUSiCOM 2* format – interesting for you Microdeal fans who want to upgrade to a Falcon. A context sensitive on-line help system is also included with the new version.

In short, *MUSiCOM* has grown up and could well become *the* digital audio package for the non-musician who wants sound for games, video or just enjoyment.

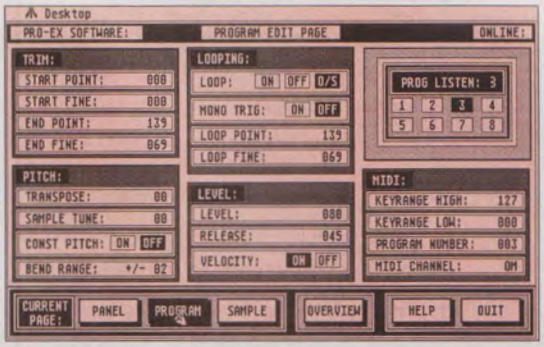
Price is to be announced but it's expected to be between £60 and £80.



Adjusting levels is very easy. The meters are accurate and include two clip indicators, one per channel, to help eliminate distortion.



Remote control your SO1 from this window...



... and edit the numbers in this one.

A PRO-EXCELLENT IDEA!

Akai's SO1 is now the best-selling sampler of all time. Kevin Earley considers life with the Pro-Ex editor...

The ST has always been popular with musicians due to its friendly operating system and built-in MIDI ports. Since the world's best selling sampler is now the Akai SO1, it must be a good idea to find a combined use for them. Enter *Pro-Ex* from The Deluxe Corporation.

Although the SO1 is a great bit of kit for the amateur or semi-pro musician, its one drawback is the lack of an informative display, making it difficult and time consuming to "Loop" sounds cleanly. *Pro-Ex* provides a very cost effective solution to this problem, showing you the bits you can't see with the naked eye...

PRO-EXCITEMENT!

Come closer and I'll explain... A digital sampler records bits of audio by taking a "snapshot" of the sound many thousands of times each second and converting this into numbers. Since all this data is stored numerically, it is relatively simple for this information to be sent down a MIDI cable so allowing whole samples to be transferred between machines. *Pro-Ex* only needs enough information to allow the program to display a sample's waveform in detail on the screen, although it still takes a while for the waveform to draw. Since the actual sample stays in the SO1, even a 520ST can be used to edit samples, and, given this accurate display, the task of spotting a good loop point is made easy. A glance at the waveform is usually enough to zero in on the areas likely to match in volume and tone.

In use, *Pro-Ex* is simple and quick to use. A swift double-click on the program runs it from the floppy, although since the disk is copy-protected, a back-up would have been nice. Once you have a sample in your SO1, a click on the "Online" button causes *Pro-Ex* to interrogate the SO1 which, in reply, sends back its current settings and the waveform data for the currently selected part.

There are four windows in which edits can be made. *Panel* gives you a replica of the SO1's front panel display while *Program* details all the parameters for the currently selected part. *Overview* supplies a list of all parameters for all the parts, which is useful for comparing settings between Programs. But the big one is *Sample* where the naked waveform is displayed. Looping a sample is just a matter of looking for regular patterns within the waveform display, and moving the "Loop" and "End" points to them – it should loop without a glitch.

The ability to "loop spot" in this way makes *Pro-Ex* a very useful and well thought out tool. Full marks to Deluxe.



Loop points are obvious – when you can see them like this!

INSIDE INFO

The Akai SO1 combines good audio quality with simple operation. As an introduction to pro-quality sampling it's hard to fault at a street price of under £700. The standard unit gives 15.625 seconds of sampling time and a 1Mb memory upgrade (about £80) is available to double this.

The SO1 has eight parts or "programs" in which a sample can be stored, each with its own settings for MIDI Channel, Keyboard Range, Loop Point and so on. Although only eight note polyphonic, with careful choice samples could make all the difference to your music. You wouldn't believe what is possible with 15 seconds and 8 notes until you remember that the ten tears ago samplers had less sampling time and cost more than a house!

- ✓ Easy to use
- ✓ Great time saver
- ✓ Makes up for the SO1's lack of display

PROS AND CONS

- ✗ No autoloop facility
- ✗ Program disk is copy protected

"If you own an Akai SO1 and an ST, buy Pro-Ex now!"

NAME: PRO-EX
COMPANY: THE DELUXE CORPORATION
CONTACT: 0272 702712
PRICE: £49.95
SYSTEM: ANY ST, HI-RES ONLY
MIN MEMORY: 0.5MB

EASE OF USE	★★★★★
DOCUMENTATION	★★★★☆
EFFECTIVENESS	★★★★½
VALUE FOR MONEY	★★★★½
OVERALL	83%

Family Roots

Family Roots is an invaluable aid to both professional and amateur genealogists. It is designed around an integrated workbench which allows you to create your family tree graphically on the screen by linking directly between the individuals. The powerful database can be viewed instantly at the click of a mouse button. The search function enables fast cross referencing and multiple scanning.

What The Press are saying about Family Roots:-

"I can certainly recommend it if you are working on a family history – Family Roots is going to simplify your record keeping enormously and is a pleasure to use." – **Micro Computer Mart**

"Certainly more than you'll ever need, unless you manage to trace your relatives back to Fred and Wilma Flintstone." – **Atari ST User**

"All in all, the best genealogy program available for the ST and well worth the money if you are considering tracing your family." – **ST Format**

To order your copy of Family Roots, send a cheque or postal order for £24.95 to the address below. UK postage free, please add £1.50 for Europe or £3.00 for Rest of World.

A disk with useable demos of Family Roots, Around The World, Stone Cold Sober and Professional Virus.

FALCON Software

OVER 2,500 DISKS OF TOP QUALITY PUBLIC DOMAIN AND SHAREWARE for the ST, STE and FALCON

FALCON Software

After many years supporting the Atari ST, Floppyshop were the first company to offer PD and Shareware for the Falcon 030. Unlike some PD Libraries who advertise Falcon software and copy the disks on PCs, we have had a Falcon for over a year and actually take the time to test the software on our machine, ensuring a professional service all round. Both our catalogues are currently the most comprehensive available from any supplier. Over the coming months, our support will further extend into several new commercial releases of our own, all of which will be compatible with the new machine. We also have Falcon specific software under development. This in no way lessens our commitment to our ST and STE customers. We remain firmly behind the entire ST range. Our catalogues are disk based and simple to use. It has a powerful search facility and can output to printer if required. Floppyshop are also distributors of the Budgie UK Licenseware range. For a free copy of either catalogue disk, send us a blank disk with a note of your name and address, stating whether you require the ST or Falcon catalogue. Alternatively you can send a Cheque or PO for 80p and we'll supply the disk. Please make Cheque or PO (UK currency only) payable to Floppyshop. Major Credit Cards welcome. UK Postage FREE, Overseas Postage to: Europe £1.00 per order, Rest of World 10% of order value (minimum charge £2.00).

COMING SOON...

ChromaStudio 24 – The Ultimate Graphic Tool for your Atari Falcon, is in the final stages of development. It will set the standards that others will follow, in art, animation, morphing and image processing, making it the most all encompassing program of its kind on any computer. Chroma is expected in February, watch this magazine for release date and price.

Floppyshop, Dept STRev, PO Box 273, Aberdeen, AB9 8SJ

General Office/Technical Queries Tel/Fax: (0224) 586208
Credit Card Orders Only Tel/Fax: (0224) 312756

ST-EPROM Programmer £127.98



* Programs common 28 PIN devices eg. 2764, 27128, 27256 and 27512 also 271001/272001 via 32 pin adaptor.
* 12.5v and 21v program voltage selection.
* Choice of programming algorithms.
* ROMDISK software included FREE makes it simple to store programs in FAST non-volatile silicon (acts like disk drive).
* Files downloadable via serial port.
* Simple installation, plugs into Atari's cartridge port.

ST-ROMPORT Expander £53.95

* Allows up to 3 devices to be plugged into the ST's cartridge port simultaneously.
* Use Samplers, Security dongles ... without unplugging. * Saves time improves reliability (buffered).
* Triple the effective size of your SILICONE ROMDISK. * Simple installation.

SILICON ROMDISK (takes two 27512s) £16.95

How to order: Enclose cheques/PO made payable to: Silicon Systems (Prices FULLY INCLUSIVE).

Silicon Systems
144 Hampton Road West, Hanworth, Middx. TW13 6BB
Tel: 081-898 4121 (9am-8pm 7 days)

A.W.F. PDL

ATARI ST/STE PUBLIC DOMAIN SOFTWARE
123 HAZELWELL CRESCENT, STIRCHLEY, BIRMINGHAM B30 2QE, ENGLAND
021-458-4345

FOR A COMPLETE DISK CATALOGUE SEND £1 OR A BLANK DISK.

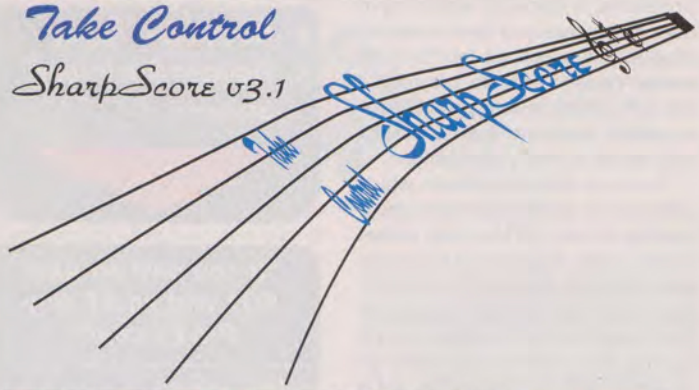
PD Software only £1.50 each, 10 or more £1.25 each, 15 or more then choose two free PD Disks

We stock: Demos, Art, Music, Business, Clip Art, Games, P.O.V., General, Utilities, Program, Sound Trackers, Adventure, Education, Communications, plus loads more!!!! Powerfist/Licenceware

Please make cheques/postal orders payable to: A. FERN

Take Control

SharpScore v3.1





DEMONSTRATION DISK AVAILABLE

Upgrade available for registered users.

SharpScore is the ultimate publishing system for music. It is the only professional product of its kind for the Atari ST and Falcon, and it is used by musicians, composers, orchestras, copyists and publishers.

Unlike other packages, SharpScore is based around the page layout, for complete control of the final result in the highest quality. You have complete control over spacing, text fonts, note beaming, line thicknesses, and a variety of other parameters. It is powerful to use, but incredibly easy to learn.

This new version of the program incorporates many new powerful editing functions, Automated Part Extraction, optional Automated Note Beaming, larger symbol repertoire, extended chord window facility, real time entry from a MIDI keyboard, playback of scores, graphics functions import and export and MIDI file import and export. This allows the transfer of files from sequencer packages for typesetting and printing.

For more details, a demonstration disk and example printouts, or to place an order, contact:

Take Control
Institute of Research & Development
University of Birmingham Research Park
Vincent Drive, Birmingham B15 2SQ, U.K.
Tel. 021 415 4155 – Fax. 021 415 4156

TICKLING THE IVORIES!

Have you ever wanted to sound like a great pianist? With PG Music's newest offering, Kevin Pawsey finds that anyone can...

Multimedia; the ability to listen to sounds, see information, graphics and interact with these in one package – an excellent medium for learning. The only problem is that developers have not seen the ST as a relevant computer although perhaps this is changing with the arrival of *The Pianist*...

Described as "an exciting and educational music program containing a huge selection of over 200 of the world's most popular classical piano pieces, performed by world renowned concert pianists!", *The Pianist* certainly offers much.

THE PERFORMANCE

The main draw of the program is the excellent MIDI files. They really make you wish you had kept up with the piano lessons – Chopin's *Fantaisie-Impromptu* and Liszt's *Paganini Etude* are amazing! After listening to all 215 files, there wasn't one that was even slightly disappointing. Checking the files on *Cubase*'s List Edit proved that these are genuine live recordings – not even a whiff of quantising or step recording to be found.

Obviously the sound quality of play-back depends on the MIDI sound sources you have. The accompanying blurb states: "You'll hear the music playing with CD quality through your MIDI system" – but only if your MIDI equipment uses 16-bit, 44.1kHz samples. The files were tried on everything from a Akai S-1000 to a Roland Sound Canvas and Yamaha Portasound. All sounded excellent but don't expect an ageing 8-bit sampler to sound like a Steinway Grand!

Selecting a pipe organ sound, whacking up the reverb and loading up Bach's *Tocatta and Fugue in D* is quite brilliant! You get 215 outstanding MIDI files for the princely some of 22p each, but there is more...

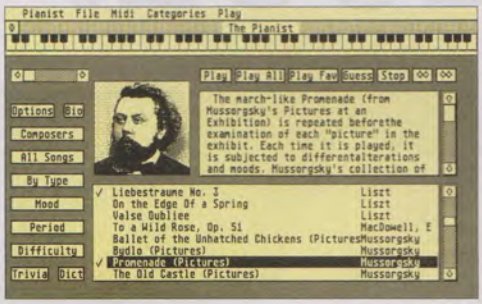
INFORMATION

The pianist is also an outstanding, in-depth musical encyclopedia. When you select a piece for playback, a picture of the composer is shown along with information about the style and content. You can select a piece by its type, mood or period and how difficult it is to perform. There are details about a composer's life and music in a very interesting biography. If there is a musical term that is a little vague, *The Pianist* has a comprehensive musical dictionary – those in book shops pale into insignificance next to this.

The selection of biographies and General MIDI instruments is a touch unusual. Clicking on the "down" arrow sets the whole list scrolling, waiting for you to stop it as your choice whizzes by! It is not a big problem though; you soon get used to its unwieldy feel.

At the top of the screen is an 88-note piano keyboard. When you play back a file, you see exactly what notes are being played in real time. If you want to learn how the piece is performed, slow it down or play it at half speed.

It is difficult to believe just how much musical information is at your disposal. To test all this newly acquired knowledge, *The Pianist* has a Trivia Quiz and a "Guess the Song" game. Up to four players can play the quiz, and the program keeps score and gives a percentage. The questions are fairly entertaining, being fun as well as a learning aid. Notation? No. A shame – in spite of the real time keyboard, you can learn so much about music and playing the piano from looking at excerpts of a score.



Categories are on the left and the largest box is for song selection. The chap with the beard is the composer himself!

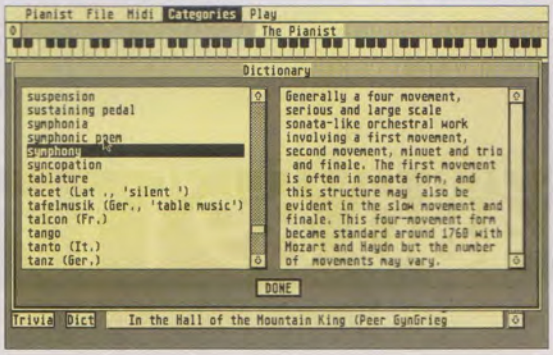
OPTIONS

The Pianist makes excellent use of General MIDI (GM). If you get bored listening to a piano playing the files, you can pull down the MIDI menu and change a patch by name. *The Pianist* also allows those with a GM/GS module to change the volume, reverb, chorus, panning and tuning.

Other options on play-back include the ability to transpose the piece, set MIDI channel and patch number, adjust the tempo and control the velocity. It's just a shame that you cannot store these settings.

VERDICT

The Pianist is probably the best music education package available on the ST to date. The way it combines sound, text, pictures, the real time keyboard and good documentation in one neat package should make it top of the list for every ST-owning school, music teacher and musician.



Look up any words or phrases that you may be unsure of. The information here is as good as any book...

And as the MIDI files can be loaded into sequencers, the scope of this program is expanded further still. It will be interesting to see if any data disks follow – how about one for Jazz? I like this idea of multimedia on a ST – I don't want to give this one back!

- ✓ Excellent MIDI File quality
- ✓ Original, informative and easy to use

PROS AND CONS

- ✗ Lack of notation
- ✗ Unwieldy selection process

"Any musician the least bit interested in the Classics should have a copy of The Pianist."

NAME: THE PIANIST
COMPANY: ARBITER GROUP PLC
CONTACT: 081-202 1199
PRICE: £49
MIN MEMORY: 1MB

EASE OF USE	★★★★★
DOCUMENTATION	★★★★★
EFFECTIVENESS	★★★★★
VALUE FOR MONEY	★★★★★

OVERALL 87%

MORE MEMORY – THE ESSENTIAL

NEW LOW PRICE!

STe Upgrade to 1MB *£7.99*

STe Upgrade to 2MB *£49.99*

STe Upgrade to 4MB *£99.00*

STFM Upgrade to 1MB *£34.99*

ATARI ST REVIEW EXCLUSIVE

STFM Upgrade to 2.5MB *£59*

STFM Upgrade to 4MB *£99*



UPGRADING AN STE

A 520 STe is usually supplied with two 256K SIMMs and has sockets to plug in two more – it's that easy! A few do not have sockets, in which case you will need a pair of adaptors. These may need soldering; if this is the case, we will supply the sockets at no extra cost – that's service!

A 1040 STe will usually have four 256K SIMMs. In order to upgrade you need to replace these with two or four 1MB SIMMs to give either 2 or 4 MB of memory.

UPGRADING AN STFM

In over 90% of all STFMs the upgrade plugs straight in. There are possible problems if either the video shifter chip or the MMU chip in your computer are not in sockets.

Occasionally, extra components and a little soldering may be required. In these cases, we supply any extra components free of charge.

4MB STFM UPGRADE FOR JUST **£99!**

ORDER HOTLINE

Call 0480 891171

These lines are manned Monday to Friday, 10am to 8pm, and Saturday, 10am to 5pm.

If you call outside these hours you can place an order by answerphone – just give the information on the order form as it appears. You might find it easiest to complete the order form before calling so that you can read from it.

This month continues the Atari ST Review campaign to get every ST owner to upgrade the memory of their machine to at least 1MB and to have all those useful items – at the right price!

FITTING SERVICE AVAILABLE – CALL OUR ORDER HOTLINE AND SPEAK TO KEITH FOR MORE INFORMATION!

ST UPGRADE

12 REASONS TO BUY FROM ATARI ST REVIEW...

All the products offered by ST Review have been carefully selected by us as the best in their class. But top quality does not mean top price. Thanks to our huge buying power we can deliver top value for our readers too.

- ✓ *All memory boards are populated with memory*
- ✓ *All memory boards are individually tested*
- ✓ *All STFM upgrades use the Marpet connector system, acknowledged to be the easiest way to upgrade an STFM*
- ✓ *Support from a top ST engineer is just a telephone call away*
- ✓ *Prices include VAT and postage & packing – the price you see is the price you pay*
- ✓ *No minimum order and no credit card surcharges*
- ✓ *Memory upgrades carry an exceptional five year warranty and other products a full 12 months*
- ✓ *28 day no-quibble money back guarantee*
- ✓ *24-hour order hotline*
- ✓ *Because we only sell a few items, your order will normally be supplied straight from our large stocks*
- ✓ *Your credit or debit card will not be processed if the item you order is not in stock*
- ✓ *Experienced technicians are available for advice before placing an order*

ALL MEMORY UPGRADES INCLUDE FREE DISK!

Each memory upgrade comes with a free disk including memory test software, RAM disk, print spooler and disk copier, all to ensure you can make the most of your new memory upgrade...

OVER 5,000...



... ST Review owners have now taken the plunge and upgraded either an STFM or STe to 1Mb through our readers' offers. This makes ST Review probably the largest supplier of memory in the UK.

And to give you the best offer we can, you're definitely in luck if you own an STe – we've dropped the price of the 1Mb upgrade to just £7.99!

Why do so many of you increase your ST's memory? Perhaps it's to make use of our cover disk programs which often require a full meg to run in, including last month's Timeworks 2 program. Or perhaps you're involved with music or DTP and are fed up with not being able to load all of the modules that your program can provide. Whatever the reason, ST Review is the place to get that essential upgrade and to benefit from our continued drive to bring you the best cover disk software in the land.

Need another incentive? How about the great offer for Graham Gooch's Cricket on page 66, which needs 1Mb to run...

Don't fancy doing the job yourself? No problem – our fitting service has been reintroduced! Just see the flash at the top of the page.

Get the best from ST Review – get a meg!

FREE DELIVERY!

TURN OVER...

...for more readers' offers and details of ordering by fax or post

SEE THE PREVIOUS PAGE FOR OUR SENSATIONAL MEMORY UPGRADE OFFERS!

MOUSE/JOYSTICK EXTENSIONS



Either a single or twin joystick adaptor will save you from the ST's most common hardware fault – a broken mouse port. Changing from mouse to joystick is that much easier if you have extension cables.

from £3.99!

MOUSE

£9.99!



The ST may be a great computer but the mouse that comes with it simply is not up to scratch. The *ST Review* mouse is a major enhancement because it uses micro-switches for the buttons, making it much lighter and easier to click. Our mouse also has a much higher resolution – 280 dots per inch which means you need far less desk space and get much finer control.

CLOCK CARTRIDGE

Who sets the time each time they switch on their ST? If like many thousands of ST owners you don't, then you are missing out. Every time you save a file it gets stamped with the time and date – invaluable when you are hunting for a file. Get a clock cartridge and the time will be set automatically each time you switch on your ST.



from £12.99!

ST REVIEW BINDER

ST Review is *the* essential ST magazine – and our custom binder will help you to keep your back issues in pristine condition. No more searching under the bed for last month's issue! Our green and gold beauties will accept up to 12 issues and allow you to read any issue of *ST Review* without having to remove it.



£6.49!

FREE DELIVERY!

£29.95!

UVK

£9.99!

VERSION 5.9 NOW DETECTS THE BEILSTEIN VIRUS

Everyone knows about viruses, but far too many ST owners think it can't happen to them – it can! Despite the fact that you never get disks from "friends" and only buy commercial software, a virus could still infect you. And when the gremlins get at your disks, life becomes an absolute misery.

Don't let this happen to you. UVK detects and kills more viruses than any other virus killer. We use it at *ST Review* – so should you!

EXISTING USERS CAN UPGRADE – CALL FOR DETAILS

TRACKBALL



Do you use your ST for art, graphics, DTP or music? Then you really should consider our state-of-the-art, 162 dpi trackball, as used by the editor of this magazine. Movement from one side of the screen to the other is effortless and cursor motion is rapid and smooth, far more so than with a mouse. The feel is superb thanks to the high quality micro switches under the buttons. There's also a third button that acts as a locking left button – ideal for continuous scrolling, painting or line drawing!

STE RAM UPGRADE TO 1MB	£7.99
STFM RAM UPGRADE TO 1MB	£34.99
STFM RAM UPGRADE TO 2.5MB	£59.00
STFM RAM UPGRADE TO 4 MB	£99.00
CLOCK CARTRIDGE	£12.99
CLOCK CARTRIDGE WITH THRU PORT	£15.99
MOUSE	£9.99
UVK	£9.99
SINGLE JOYSTICK EXTENSION	£3.99
DOUBLE JOYSTICK EXTENSION	£5.99
ST REVIEW BINDER	£6.49
TRACKBALL	£29.95
STE RAM UPGRADE TO 2MB	£49.99
STE RAM UPGRADE TO 4MB	£99.00

DELIVERY – FREE

CREDIT CARD ORDER LINE – 0480 891171 OR FAX YOUR ORDER – 0480 890787

TO: *ST REVIEW* READERS' OFFERS, PLEASE RUSH ME THE ITEM(S) AS TICKED IN THE BOX OPPOSITE.

I ENCLOSE TOTAL PAYMENT OF £_____

PAYABLE BY: ☐ CHEQUE ☐ P.O. ☐ CREDIT CARD

NAME: .....

ADDRESS: .....

.....

POSTCODE: ..... TEL (DAY): .....

VISA/ACCESS/MASTERCARD/DELTA/SWITCH NUMBER:

EXPIRY DATE: /

SWITCH ISSUE NO. /

SIGNATURE: _____

IMPORTANT!

Paying by CHEQUE or POSTAL ORDER – please make payable to GO DIRECT and write your cheque card guarantee number on the back. All prices are inclusive of postage & packing and VAT. Please allow 28 days for delivery from when we receive your order. For non-receipt of goods phone 0480 891171, Monday to Friday between 10am and 6pm.

Send your order to: ST REVIEW READERS' OFFERS, 7 VINEGAR HILL, ALCONBURY WESTON, HUNTINGDON PE17 5JA

LEXICOR SOFTWARE

It's cold, it's wet, now's the time to get creative with Lexicor and 16/32 Systems bundle of WINTER WARMERS. We have special prices for you, so you can experiment with the best in graphic and animation software without breaking the bank balance.

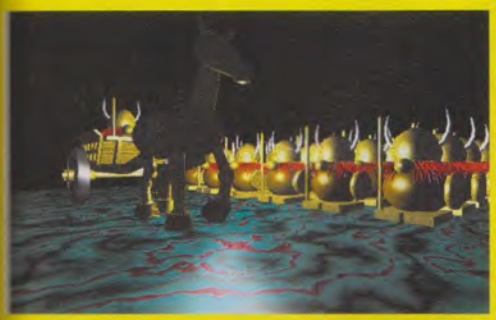
CHRONOS 3D **ST-STE-TT-Falcon** **Requires 1Mb RAM**

3D Key Frame animator and morphing package compatible with the Cyber range from Antic. CHRONOS can create animations in all Atari resolutions and supports Maths coprocessor in TT and Falcon. Loads Lexicors 3D4 and Cubers 3D2 files, creates 3D4 and Antics DLT sequential image files. Includes Wireframe and solid rendering with Phong, Gourad and Flat/Shading interpolation. Object Group and World Depth Cueing. Object Face Smoothing which removes facted appearance. Automatic colour palette. The Animation features include, Independent timelines, Morphing, Object Cycling, Object Instancing, Visibility Fades and Blurs, Camera and Director Views plus more.

RRP £159

WINTER WARMER PRICE £129 – SAVE £30





XENOMORPH **ST-STE-TT-Falcon** **Requires 1Mb RAM**

3D Object Rendering package which produces photorealistic pictures on any Atari. Xenomorph includes the following features Render objects with smooth shading, Render with highlights, Objects can cast shadows on themselves of other objects, Textures may be wood, grain, marble or you can wrap any image around the object. Each object can have it's own colour palette, 4 different Light Sources, 3 different Camera Types, View and save as SPECTRUM 512, GIF or TARGA files.

RRP £79

WINTER WARMER PRICE £59 – SAVE £20

PRISM PAINT II **ST-STE-TT-Falcon** **Requires 1Mb RAM**

The utimate art and animation package for all the Atari family. Comes in modular form so can be constantly updated and improved with new picture format modules. Comes with GIF, DEGAS, IMG, XIMG, PNT and TGA imports, will export GIF, TGA, XIMG, PNT files. Built in virtual screen, supports GDOS (inc Speedo) fonts as well as Signum fonts. More features than can be mentioned here.

RRP £129

WINTER WARMER PRICE £99 – SAVE £30



ANM LINK

ST-STE-TT-FALCON

Animation Link between CHRONOS and XENOMORPH, allows you to create Rendered pictures with XENOMORPH and animate them with CHRONOS. **FREE with ANM LINK comes GIFTO FLM – Create FLM FLI FLC anims from GIF files

RRP £69

WINTER WARMER £49

ANIMATION PACK

ST-STE-TT-FALCON

CHRONOS 3D
XENOMORPH
PRISM PAINT 1.5
ANM LINK
GIF/FLM Utils

Total Value more than £350

WINTER WARMER £240

OTHER PRODUCTS

CYBER CONTROL	£25
CYBER PAINT VRS 2.0	£25
CYBER SCULPT	£9
CYBER STUDIO VRS 2.0	£15
3D FONTS 1	£15
HUMAN DESIGN DISK	£15
SPECTRUM 512	£15

OTHER SPECIAL OFFERS

GMANPRO	£49
DRAGON GRAPH	£49
OUTSIDE	£69
RAYSTART	£59

Available from:

16/32 SYSTEMS

173 High Street, Strood, Kent ME2 2DH

Tel: 0634 710788, Fax: 0634 295895

Major Credit Cards accepted. Educational orders accepted.

Don't forget your copy of the 16/32 Systems Public Domain catalogue disk. Contains details of over 3,500 PD and Shareware disks. The catalogue includes Falcon and TT sections as well as business and games. Only £1.

GAME PLAY



Copy protection takes the form of entering a word from the manual when prompted.



Choose between the three main options of Duel, Mission or What If? modes.

DOGFIGHT

Have you ever wondered how a Spitfire compares with the firepower of a modern day aircraft? Dave "Biggles" Jones puts on his goggles and flying helmet to find out...

Comparisons are always being made between today and the past. Would Lennox Lewis have stood up to the mighty Mohammed Ali? How good is Gazza compared to Bobby Moore or Nobby Styles? Is Stephen Hendry as good a snooker player as Joe Davis at his best?

These questions and many like them have been asked throughout history and, of course, are impossible to answer with any accuracy. Guesswork is the best you can possibly do and someone is bound to disagree with the results.

One way of reducing the guesswork is to program a computer with the abilities of both and pit them against each other. The results will still not be conclusive, but it's the closest you will ever get.

In this vein, *Dogfight* lets you fight against a MiG-23S "Flogger B" in a Sopwith Camel or even take on a squadron of Messechmitt Bf109Es with an F16A Fighting Falcon. You can also take part in classic duels or follow through a complete range of missions over the last 80 years of aerial combat from the early days of the Sopwith verses the triple winged Fokker right up to the modern firepower and manoeuvrability of the Harrier or the Mirage fighters with their Heads-Up Displays (HUD) and laser guided missiles.

This game is not strictly a flight simulator, but a duelling combat game. There are no complete campaigns to fight through, but you can learn the skills that were needed with the restrictions of the aircraft in the early days of "gentlemanly" combat and compare them with the high powered action needed to fight in the air today.

GETTING STARTED

When you first load the game, you have three choices: Duel, Mission and What If?. It is probably best to start in the comparatively sedate world of 100 mph open cockpitted battle over the fields of France. These are the days when the opposing pilots don't just shoot each other down for the kill, but would make the aircraft inoperable and head off, leaving the enemy pilot to find his way home (in the air or on the ground) to return another day.

Progress on to the Spitfire or Messerschmitt from World War Two and get used to the more advanced controls and higher speeds.



All twelve aircraft in What If? mode. You can fight against one or up to five enemy planes.



You can accept the standard armaments or go to the Arms screen to change them.

THE AIRCRAFT

Twelve aircraft from six periods of history – World War One to the 1982 Syria conflict. Here's a brief outline...

Sopwith Camel: A single-seater bi-plane used as a fighter, bomber escort and for light bombing raids. With a maximum speed of 106 mph and a 130 hp engine, it has less performance than the average car!

Fokker DR1: As flown by Baron Manfred Von Richthofen – the infamous Red Baron. With its distinctive three wings, it performs similarly to the Camel.

Mk II Supermarine Spitfire: The best known of all fighter aircraft. This single seat craft is capable of up to 365 mph and can fire its machine guns at up to 1200 rounds per minute.

Messerschmitt Bf109E: Vastly out-performed by the Spitfire during the World War Two, this was originally powered by a Rolls-Royce Kestrel engine! The Daimler-Benz engine here has a 354 mph top speed.

North American F-86E Sabre: Initially flew in combat in the 1950 Korean War. The maximum speed of 678 mph is far in excess of the piston-engined propeller 'planes it replaced as its range of 850 miles.

Mikoyan-Gurevich MiG-15: The first fully operational jet fighter and without serious opposition until the F-86D in 1952. Top speed is 668 mph and it has a range of about 885 miles.

McDonnell Douglas F-4J Phantom II: First flew in 1958 and the modified EF-4E Wild Weasel saw active service in the Gulf War. It can fly at Mach 2.27 (2.27 times the speed of sound) at altitudes of over 60,000 feet and carries 30 rockets and missiles as well as a 1200 round machine gun. It's the only two seater in our group.

MiG-21 'Fishbed': The most successful of all Soviet fighters, the MiG-21 is still in service today. It has a top speed of Mach 2.1 (1285 mph) and a range of 1118 miles with external fuel tanks. It's faster, more manoeuvrable, better armed and about a third of the price of the F4 Phantom!

British Aerospace Sea Harrier FRS.1: Although quite slow with a top speed of around Mach 1 (768 mph), the Harrier has the amazing ability to hover and is the most manoeuvrable modern fighter available.

Dassault Breguet Mirage IIIE: With a maximum speed of Mach 2.2 (1460 mph) the Mirage was used to great effect by the Israelis in the Six Day War. The main threat to the Harriers in the skies over the Falklands.

General Dynamics F-16A Flying Falcon: When the F-16 first flew, it could out-fly every other fighter in the world including the uprated MiG-21. Top speed of this fighter bomber is 1300 mph (Mach 1.95) and it has a range of 339 miles without refuelling.

MiG-23S "Flogger B": The MiG-23S can manage 1520 mph (Mach 2.2) with a range of 400 miles. This swing wing design allows it to be used as a fighter or a bomber and is inspired by the American F-111.



A rear view from the cockpit, but the camera is in front of the pilot. Realistic, but not too much use.

Eventually, you can move into the jets and, when your skills are really sharp, fly at over twice the speed of sound and take on even the most dangerous of opponents.

TAKING ON MISSIONS

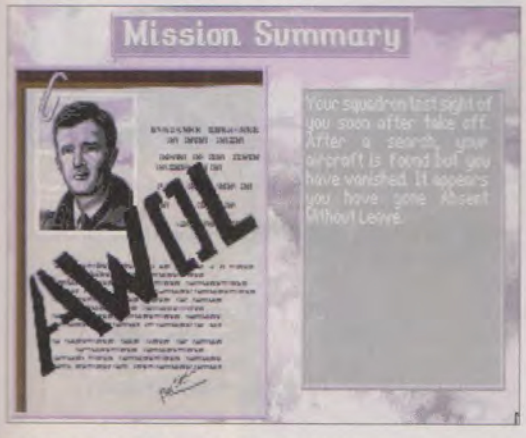
Mission mode is the next step as this involves a little more than just the dogfights themselves. A mission planning screen gives you a list of mission orders and a background scenario for each situation. You can choose to patrol an area on the map, attack a target from a list given to you, support other aircraft in an attack or defend a home territory – the choice is yours. In the missions from Vietnam onwards, you can select the armaments carried. Choose a combination of missiles and rockets before you return to the mission planning screen.

In this mode, all scenarios start on the ground so you have to learn how to take off in each of the aircraft.

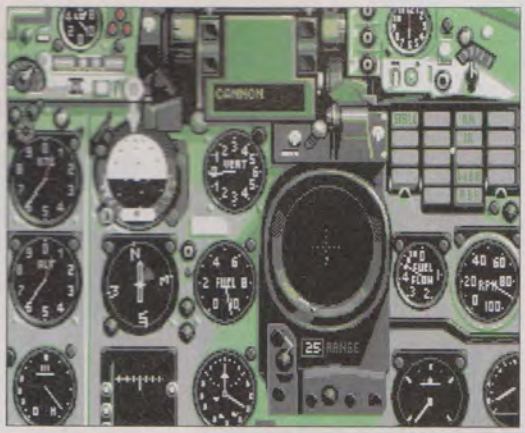
Once in the air, you can use all of the different external views available to see where any enemy aircraft are or check on the other craft involved by using the <F10> key. <F9> brings up a map so you know where you are at all times. Keep your eyes open for enemy aircraft and engage them in combat!

After a while, you get a message telling you whether the mission has been a success or failure and you will be told to return to base. Head for home and land, where you are then given a summary of the major mission events and a medal, promotion or dressing down!

Probably the most interesting of the three playing modes is What If? This lets you fly any of the twelve aircraft against any other and over any of the six different scenarios. For example, you could fly a Spitfire against a Mirage over Syria if you want. As with the Duel mode, you select the starting position of the aeroplanes and start the battle.



At the end of a mission, a performance summary is available. This one wasn't a success!



The cockpit of a MiG 21 takes some getting used to, but it all makes sense after a while.

VERDICT

Dogfight is a difficult game to get to grips with. You'll find yourself flying in a lot of empty air with your opponent behind you and watch a lot of scenes of your aircraft falling from the sky with a smoking tail when you start! But it is up to Microprose's usual standard in the quality stakes. A manual gives you all you need to know including a full rundown of the twelve aircraft available, weaponry, resources, the wars and conflicts and a whole section of aerial fighting tactics.

The package cannot be faulted for detail and quality, but the program still has to be run from floppy disk and can't be installed on a hard disk. The Technical Supplement tells you to back the disks up, but mine were protected and wouldn't copy at all! As saved games or changes in configuration are saved to disk A, this makes it a risky process if, like me, you write protect all of your disks. It also tells you that the game is totally controlled by mouse and keyboard, but a joystick is very useful for flight control...

- ✓ Good graphics and sound
- ✓ Historically accurate

PROS AND CONS

- ✗ Too much flying and not enough action
- ✗ No hard disk install

"Answers a lot of those 'maybe' questions, but really only for fighter fans."

NAME: DOGFIGHT
COMPANY: MICROPROSE
CONTACT: 0454 329510
PRICE: £34.99
RELEASE DATE: OUT NOW
MIN MEMORY: 1MB

GRAPHICS	★★★★★
SOUND	★★★★★
VFM	★★★★★
PLAYABILITY	★★★★★

OVERALL 79%

LINKS WITH THE

Recent attention to the Jaguar has also prompted a rise in interest in the Atari Lynx. Tony Kaye plays the latest releases...

Media attention has been focused on the Jaguar, the new world-beating console from Atari. But the best hand-held games machine around, bar none, is the Lynx. With superior graphics and sound, it has been left behind due to the more fashionable status of a Nintendo Game Boy or Sega Game Gear. With the launch of the Jaguar, it is hoped that the Lynx will finally be recognised as *the* hand-held to own. Some of the games recently released bear this out, many being far better than versions on the opposition. We take a look at some of the new offerings...

LEMMINGS

ATARI • £29.99

IN BRIEF: A firm favourite since its launch, *Lemmings* has recently been converted for the Lynx. It retains all of the humour and playability of the original with a few differences to make it possible to play on the smaller screen.

ATARI ST REVIEW ESSENTIAL BUY

The display scrolls smoothly through the level, controlled by moving the joypad to the edge in the direction you want to go. Pressing button B reveals a separate screen with the choice of Lemming.

For the few people who've never heard of *Lemmings*, the idea of the game is to get a percentage of the little furry creatures to the exit without killing them. This gets progressively harder as you go on, although there are ten different creatures available including Diggers, Climbers, Floaters and Bridge Builders.

ST REVIEW COMMENT: This game is a must for anyone who has ever tried to solve a puzzle. Control can be a little difficult at first, but it's every bit as addictive as its big brother.

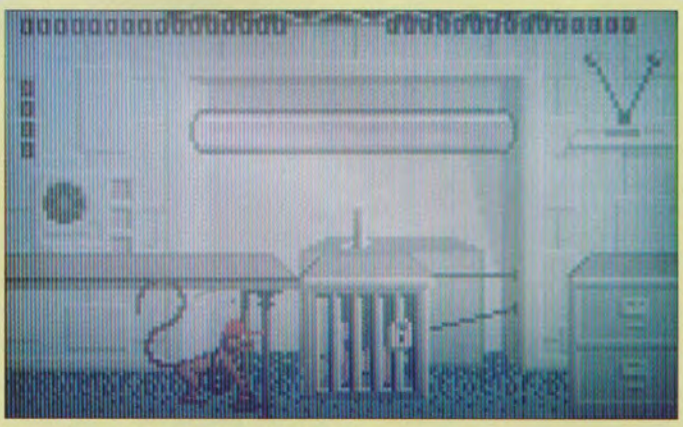
★★★★★



Guide the Lemmings safely through the course to progress to the next level.



Choose the skills to give each Lemming to get over, under or through the obstacles in its way.



Free the rabbits and avoid the lab assistants and pits in Gordo 106.

GORDO 106

ATARI • £29.99

IN BRIEF: Following an experiment, Gordo has been given extra intelligence, allowing him to escape from cage number 106. His mission is to free the other animals in the lab, get revenge on the lab assistants and escape.

Gordo can run, jump and swing from light fittings, firing apples at the lab scientists that get in his way. Collecting apples and bananas gives him more shots and increases his health as he goes.

ST REVIEW COMMENT: A challenging game with good graphics and playability. Not a classic, but plenty to keep you going. Avoid the dungeons as these can be very difficult to escape from. There are six level with up to eight screens on each to battle through.

★★★★

DOUBLE DRAGON

TELEGAMES • £29.99

IN BRIEF: One of the latest releases for the Lynx is this classic beat-'em-up arcade game. Using martial arts and various weapons found along the way, two brothers have to defeat the Shadow Boss and a savage gang called the Black Warriors. It's up to you to hack and slash your way through the screens and defeat the villains on your own or using the ComLynx™, with a friend.



Classic arcade action with Double Dragon.

ST REVIEW COMMENT: The game is a faithful reproduction of the arcade version and the sound and graphics are well up to the standard expected by Lynx owners. If you've played the arcade game or any of the home computer versions of *Double Dragon*, you'll enjoy this one, especially in two-player mode.

★★★★

FUTURE...

DESERT STRIKE – RETURN TO THE GULF

TELEGAMES • £29.99

IN BRIEF: Another arcade conversion from Telegames is *Desert Strike*, a stunning 3D helicopter war game. The objective is to fly over strategic targets, destroy them before they get a chance to fight back and save any prisoners captured by Saddam.

ATARI ST REVIEW ESSENTIAL BUY

There are 20 different missions, each with its own challenge. Starting with the first, completion is rewarded with a password, so you can come back to the game later on without having to start from the beginning again.

ST REVIEW COMMENT: Wonderful graphics and realistic sound make this an exceptional game with plenty of atmosphere. The missions are varied and increasing in difficulty to keep you coming back for more. Thoroughly recommended.

★★★★★



This is the layout of the first mission facing you in Desert Strike – Return to the Gulf.

EUROPEAN SOCCER CHALLENGE

TELEGAMES • £29.99

IN BRIEF: "It's a game of two halves, Brian". Why is it that soccer games always make you start with something like that?

European Soccer Challenge offers the choice of playing a full tournament or just the arcade game for fun. There are over 170 teams from 32 countries to choose from and you can even select the formation your team will adopt for the match.

This is another game that features the ComLynx™ system. All you need is two Lynxes and the lead for a complete head to head battle for the cup.

ST REVIEW COMMENT: The quality of the graphics and sound make this a most enjoyable footy game. As with most games of this type, it's best played with a friend (in ComLynx two player mode) for complete entertainment. Treating yourself to this one won't leave you as sick as a parrot!

★★★★



Choose your team's formation before doing battle on the field.

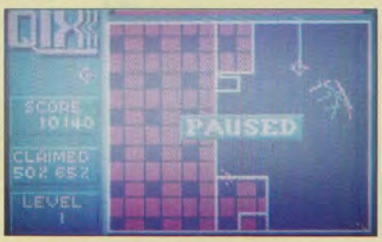
OTHER GAMES YOU MAY HAVE MISSED

If you are not a Lynx owner or have been starved of information, you may have missed some of the classics available for the machine. More titles are being released and we hope to cover some of the best of them in the future, but here are a few that may have slipped the net...

QIX

TELEGAMES • £29.99

IN BRIEF: Another classic arcade conversion of a puzzle game here. Older readers may remember *Qix* as far back as the days of the 8-bit computers like the Atari 800 range.



Qix is one of the perennials that has ported well to every format from 8-bit to the Lynx.

The idea is to capture territory and box in the Qix, which is a spinning helix roaming around the screen. You can't stay on old ground for too long either, or Qix's offspring Sparx will get you. Creating a box causes it to be filled with a pattern and each level has a threshold, a percentage required to complete the screen and move on. There are 256 levels altogether and one or two can play (not with ComLynx™).

ST REVIEW COMMENT: Puzzlers of the world unite. You must have this game, especially if you are over 25 years old and remember playing the original. A faithful reproduction which is just as infuriating as the original, this is one of the few games that have survived the test of time.

★★★★

ULTIMATE CHESS CHALLENGE

TELEGAMES • £29.99

IN BRIEF: Here's one game that's a good advertisement for the Lynx mains adaptor! Don't try to play Chess using batteries unless you are either rich or don't mind playing a game for hours only to find that the power fails just before you make the killer move and checkmate the machine on the highest setting. The automatic power off feature of the Lynx is disabled when this game is loaded so you don't lose the game if you take too long over a move.



Computers are good at playing chess, whether in 3D or viewed from the top of the board. The Lynx is no exception.

ST REVIEW COMMENT: Why buy a dedicated chess computer when the Lynx can play an outstanding, challenging game and let you blast aliens by changing the game card?

Ultimate Challenge is as good as any and will try even the most competent player. A worthy addition and less annoying for other commuters if played on the train than the constant blipping of dying aliens!

★★★★

PLAY THE GAME...

EXCLUSIVE ST REVIEW OFFER

...with ST Review's exclusive offer for Graham Gooch's Second Innings!





Remember *Graham Gooch World Class Cricket*? We reviewed it back in September and rated it very highly. Now *ST Review*, in conjunction with Audiogenic, are offering you the brand new *Graham Gooch's Second Innings* for just £9.99!

You'll get all 18 county teams, including all players who represented an English county during 1993 together with the authentic batting and bowling averages at the end of the season. Also included is the England squad selected for the 1994 tour of the West Indies with up-to-date averages!

And just to make life more interesting, the teams from four major series are included together with their accurate averages:

- 1963 – England vs West Indies, second test. Colin Cowdrey comes in to bat with a broken wrist!
- 1964 – England vs Australia, fifth test. Freddie Trueman becomes the first bowler to take 300 test wickets!
- 1981 – England vs Australia, third test. The famous Ian Botham test where the master wins the match almost single-handed!
- 1990 – England vs India, first test. Graham Gooch scores 333, the sixth highest test score of all time and the biggest ever at Lords!





The data disk requires *Graham Gooch World Class Cricket* so here at *ST Review*, we're making you an offer you can't refuse. Buy *Graham Gooch World Class Cricket* from us and we'll throw in *Graham Gooch's Second Innings* for ***FREE!*** That's right – you save £9.99 and delivery is also ***FREE!***

This offer is exclusive to *ST Review* until at least March 31, 1994 – you won't be able to get *Graham Gooch's Second Innings* from any other magazine or retailer. So this is your chance to take us up on a truly exclusive offer!

GAMES OFFER

SELECT ONE OF THE FOLLOWING:

☐ GRAHAM GOOCH'S SECOND INNINGS..... *£9.99*

☐ GRAHAM GOOCH'S WORLD CLASS CRICKET WITH GRAHAM GOOCH'S SECOND INNINGS.. ..... *£29.99*

☑ DELIVERY – FREE

CREDIT CARD ORDER LINE – 0625 878888

(ASK FOR VICKY)

OR FAX YOUR ORDER – 0625 850652

IMPORTANT!

Paying by CHEQUE or POSTAL ORDER – please make payable to Europress Enterprise and write your cheque guarantee number on the back. All prices inclusive of p&p and VAT. Please allow 28 days for delivery from when we receive your order. For non-receipt of goods, call 0625 878888 (ask for Vicky), Monday to Friday between 9am and 5pm.

TO: *ST REVIEW* CRICKET OFFER. PLEASE RUSH ME THE GAME OR GAMES AS DETAILED ON THE LEFT.

I ENCLOSE TOTAL PAYMENT OF £____

PAYABLE BY: ☐ CHEQUE ☐ P.O. ☐ CREDIT CARD

NAME: .....

ADDRESS: .....

.....

POSTCODE: ..... TEL (DAY): .....

VISA/ACCESS/MASTERCARD/DELTA/SWITCH NUMBER:

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

EXPIRY DATE: /

SIGNATURE: _____ SWITCH ISSUE NO. /

Send your order to: ST REVIEW CRICKET OFFER, EUROPRESS ENTERPRISE, EUROPA HOUSE, ADLINGTON PARK, MACCLESFIELD SK10 4NP

Another trio of budget games brought to you by Dave "save a quid" Jones...

VFM

ATARI ST REVIEW BUDGET BUY

HOOK

HIT SQUAD • £9.99 • 061-832 6633

IN BRIEF: We all know the story of Peter Pan and the battles with his arch-enemy, Captain Hook. Brought up to date using the wizardry and magic of Steven Spielberg, the legend continues and, in an increasing attempt to cash in on the movie/computer game tie-in, you have the chance to fight Hook and rescue your kidnapped children – just like Robin Williams did in the film. Well not exactly like him, but in this graphic adventure from the Hit Squad.

You take the role of Peter and, using all of your skill and cunning, have to travel back to Neverland with the help of Tinkerbell to find Hook and face him for one final battle.

ST REVIEW COMMENT: Good graphic adventures are few and far between on the ST. This game did well when full priced so at under a tenner, it must be worth buying – the game is far more entertaining than the press reviews of the film! A good adventure that will keep you playing for a long time.



The evil Hook has to be found and Peter needs to be reminded of his past...

SHADOWLANDS

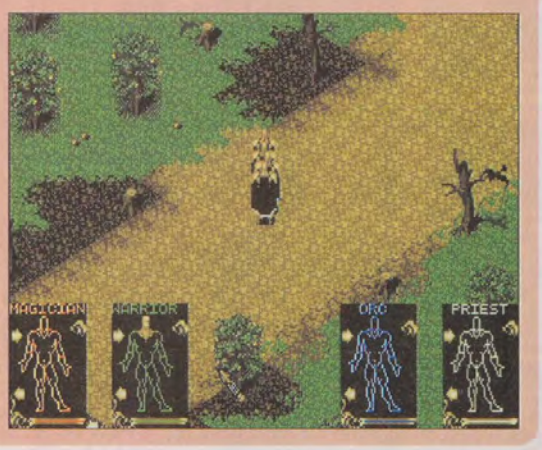
HIT SQUAD • £9.99 • 061-832 6633

IN BRIEF: Vashnar, the warrior Prince was killed in battle in the Shadowlands, but his spirit lives on. He discovers that he can control the actions and thoughts of his subjects, so he chooses four of them to help him gain retribution.

Shadowlands is a role playing game set in a mysterious world full of traps, puzzles and enemies. The object is to guide the four warriors that you control through the land to confront The Keeper – the Undead Guardian of Your Physical Self and return to living flesh once again.

The play area is a 3D representation of the field of vision of your men and you control them with the mouse by clicking on the various parts of the characters. For example, for one of them to walk, you click on his legs. As you proceed, puzzles and enemies will appear for you to overcome before you can meet with The Keeper and fulfil your objectives.

ST REVIEW COMMENT: This is a challenging RPG with many aspects to the gameplay. There's nothing really new and control can be a little awkward at first, but it soon becomes easier to move around. When playing, read and collect everything you can – you never know what you might need later. The graphics and sound are not the best ever, but good enough to add to the atmosphere.



Influence your Warriors in the Shadowlands and lead them to your goal.

PARASOL STARS

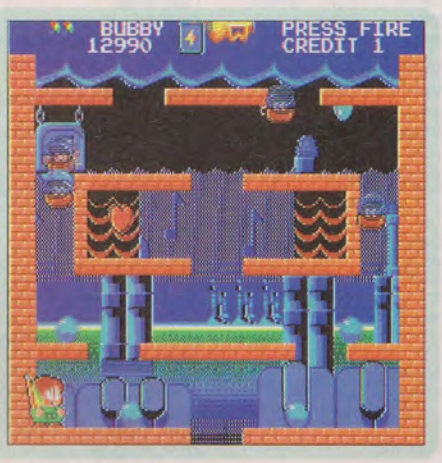
HIT SQUAD • £9.99 • 061-832 6633

IN BRIEF: First, there was *Bubble Bobble*. Then came *Rainbow Islands* and now, *Parasol Stars, Rainbow Islands 2*. The adventures of Bub and Bob continue in this latest platform arcade conversion.

The pair are taking a well earned holiday after saving all of the inhabitants of the Rainbow Islands when the evil Chaostikhan unleashes a new threat in the form of a range of monsters into the universe. Armed with magic parasols (umbrellas to us British) given to them by the grateful Rainbow Islanders, our two heroes set off to defeat the monsters and save the universe.

There are seven planets to visit, each with its own theme and range of monsters to defeat. The eighth world is Rainbow World, Bub and Bob's home, where they can take a well earned rest if they get there before Chaostikhan.

ST REVIEW COMMENT: *Parasol Stars* is a good conversion of the arcade hit. While it offers nothing new, there is still enough mileage in this one to while away several hours working through the levels.



Save Music World and progress through using your magic parasol...

Greensward House,
The Broadway,
Totland, IOW,
PO39 0BX

TEL: 0983 756056
FAX: 0983 755800

MT SOFTWARE

PUBLIC DOMAIN, LICENCEWARE, SHAREWARE FOR ATARI ST/STE

Disks: 1=£2.50 2-5=£2 each 6-9=£1.80 each 10-19=£1.60 each 20+=£1.40 each

5 Disks = £10 10 Disks = £16 20 Disks = £28

THE A-Z OF PD, LICENCEWARE + SHAREWARE

Our brand new, printed, A-Z Guide provides full descriptions on all the disks listed below plus many, many more. The guide plus November disk update plus Special Xmas Gift list is supplied FREE WITH ALL ORDERS. If not ordering then please send 3 x 1st class stamps.

ACCOUNTS
U141 Biz Accounts (Demo)
U140 Accountability
U722 Invoice Master
U34 Double Sentry Accounts

AMATEUR RADIO
C679 Morse Tutor
C13 Hambase (Mono)
C11 PK232 Fax (Mono 1Mb)
C10 Packet System

ART & GRAPHICS
A703 Printing Press v3.03
A704 Printing Press Support
A684 Ramworld 2
A680 Clip It
A692 Picswitch 1, Paintpot
A736 Gemview
A737 Pad (Mono 1Mb)
A78 Electronic Art
A77 Mini Draft
A73 PChrome
A72 Crack Art
A71 Art Tutor (1Mb)
A70 Autoplay
A66 View Gif
A64 KDoodler
A63 Colourburst II
A61 Electronic Image
A59 Mandelbrot Adventure
A58 Fractal Chaos
A50 Image Manager
A44 Sprite Studio
A43 Low Cost Cad
A36 Format Converters
A34 Animate
A32 Hypertext
A31 St Cad
A26 Doodle
A24 Ani ST
A20 Fractal Zoom
A18 Printmaster Library
A8 Degas Extras
A1 Palette Master

ASTROLOGY
U100 Astro 22
U95 Astro Selection

ASTRONOMY
U115 Stargate (Mono)
U65 Planets
U45 Planetarium
G137 Solar System Geography

BUDGIE UK
We stock the entire range of Budgie UK disks – Please see our catalogue for full details or order by title.

BBS
U48 Citadel
U43 Mini BBS, Starnet

CHEMISTRY
U64 Lewis 123 (Mono)
U62 Chemistry – various
U60 Welcome to chemistry (not ST)

CLIP ART
Lots of clip art in our A-Z guide including:
CA705 Business
CA706 Dogs
CA707 Famous People

COMMUNICATIONS
C1 Uniterm
C8 Vanterm
C7 PC Intercom, Flying Start

COOKERY
U54 Assistant Chef

DATABASES
U120 Fastbase
U102 Datastore
U89 Zapcard
U72 TCos
U70 Address Book
U39 WG Data
U36 Card ST
U12 DB Master
U9 First Base

DESK ACCESSORIES
U114 Deskpac Plus
U97 Mouse Tricks
U59 Selection of DA's
U57 DC Shifter & Accs
U24 Mouse

DISK & VIRUS
U114 Sagrotan Virus
U104 Compacters
U99 Mug Utilities
U93 Hard Disk Utilities
U31 Quick Disk Utilities
U29 Superboot 8
U27 Undelete & others
U16 Fastcopy 3 & Hypocopy 2

EDUCATION
G735 School not School
G701 Sticky Picture, Weather
G731 Scrabble
G733 Painting Book, Colouring Book
G734 Maths Circus, Eat Words
G709 Chunnel
G710 Sounds Exciting
G674 From Pics to Parliament
G673 Franglais 1-6
G666 Master Time
G665 Magic Story Book
G664 2nd World War
G392 USSR 1900's
G391 USA 1900's (2 disks)
G243 Computer School
G187 Noah
G199 GCSE Maths
G142 Dot2 Dot, Kidcolour, Kidshape
G139 Mix 'n' Match
G138 Body Shop
G135 Geography Tutor
G134 The Search
G133 Zoo Maker
G132 Butterfly in the Park, Me First
G98 Shipwreck
G94 Colouring Book
G79 Racing, Monkeys & Balloons, Spectral Souey
G41 Kidmusic, Kidpiano, Kidgraph, Kidgrid 2
G36 History File (3 disks)
G23 Kidpublisher, Kidsong, Numeric Go Round, Braile
G22 Kidpotato, Kidsabc, Kidsketch, Kidstory
G16 Maths Made Easy

ELECTRONICS
U92 Electronics
A78 Electronic Art

FILMS
U75 Film File

FONT DISKS
Our A-Z Guide features huge selection of fonts for:
Calamus
Easy Text Plus/Pro
Signum
Pagestream
Publishing Partner
Write On & That's Write

FOOTBALL
U105 Plan Reader Suite
U109 Poolwise
U88 Football Data

GAMES – ADVENTURE
G738 The Obscure Naturalist
G739 Shadow of the Gallows
G744 Hammer to Fall
G745 Underworld 1 + 2
G650 Treasure of the New King
G662 Pegasus (1Mb)
G661 Slayer (1Mb)
G660 Black Dawn
G651 Wish You Were Here, Wizards Dungeon
G261 Eaglestar
G250 Grandad 1
G235 Everyday
G206 Don't Bank On It
G158 Pyramid of Muna
G159 Battle of Philip Against Forces of Creation
G160 Underground Adventure
G162 Tamoret
G161 Sir Ramic Hobbs & The High Level Gorilla
G165 Quest for the Holy Grail
G166 Dragon Slayer
G167 Son of Stageyright
G168 House of the O's
G169 Fast Lane
G170 Crusade Adventure
G171 Adventures of Alice
G172 Paranoia
G173 Squynchia
G174 Elfs Adventure
G175 Star Portal
G176 Pork
G177 Easter Egg Hunt
G179 Ghost Town
G180 A Fable
G197 Operation Blue Sunrise
G208 The Mystic Well
G140 Dungeon Quest
G96 Dudleys Dilemma
G87 Tark
G84 Elvern Crystals
G78 Time Adventure
G75 Nethack (1Mb)
G53 Assassin
G52 Invasion
G38 Wizards Tower
G37 Under Berkwood
G15 Once a King
G6 Darkness in Forever

GAMES – COLOUR
G730 GNU Graphical Chess
G711/712 Grandad in Search of Sandwiches
G728 Building Trouble, Sub Hunt
G732 Spin the Wheel
G741 Grav 2
G742 Card Games
G743 Matchplay Darts
G747 Hypnotic Lands
G685 Software Projects
G687 Midi Zap
G688 Rebound
G690 Kubes
G749 Chaos
G713 Neuromorph
G714 Psycho Pig 2 (2 disks)
G715 Galactic Fruitbowl
G716 Fatemaster
G717 Nostram
G657 Course Fisherman (1Mb)
G659 Money Mania
G658 Tower Power
G656 Recoil
G655 Megapede, Mrs Munchie (1Mb)
G268 Hardcore
G267 Fast Freddy
G266 Board Games
G265 Siam Railway Sims
G263 Hacman 2 (1Mb)
G258 Plax Attack, Byte Man, Air to Air Combat
G257 Fruit Pursuit
G256 Jiggers
G255 All Square
G254 Wildcat
G253 Gone to the Dogs
G240 Fly Robin Fly
G239 Star Corp (1Mb)
G238 Haunted House
G237 Ruthless
G234 KO2 Team Editor, Hyper Fighter
G233 Compendium
G232 Revenge of Mutant Camel
G213 Mystics
G212 Number Guesser
G210 Chess, Blaster, Poker
G202 Zedonoid
G201 Pop Music Challenge
G196 Llamatron
G195 Casewars
G151 Daniels Dungeon
G147 Jitterbug
G146 Bonk the Gonk
G144 Fly Over
G141 Boxing Champ
G123 Tracker
G122 Overlander
G117 Key to Atlantis
G127 Battle Command
G126 Wheel of Fortune
G124 The Name Game
G119 Colour Chess
G111 Masterbreak, Chess Escape, Battleships
G105 Jokes
G104 Bermuda Race 2
G103 Top of the Pops
G102 Stumped
G101 League Soccer
G82 Yahtzy
G61 Stocks & Bonds
G44 Flight Simulator
G43 Treasure Search
G19 ST Vegas
G2 Strip Breakout

GENEALOGY
U109 Tree
U83 Neugen
U68 Genealogy

HORSE RACING
U116 Formfinder

KNITTING
U442 Knitting Patterns/Puncher (not STE)

MUSIC – KAWAI
M42 Kawai K1 Editor
M71 Kawai K4 Editor
M718 Kawai K1 Sounds

MUSIC – KORG
M72 M1/MIR Voice Ed (1Mb)

MUSIC – QUARTET
M54 Music + Samples
M43 Music (9 pieces)
M33 Music Files
M34 50 Samples
M28 Samples + Songs

MUSIC – ROLAND
M49 Roland D10/20 Ed (Mono)
M17 Roland D50 Ed
M691 Roland D5 Patches
M8 Roland MT32 Ed
M718 Roland MT32 Sounds
M38 Roland Juno 1/2 Ed

MUSIC – SAMPLING
M68 Sound Merlin
M24 Programming
M20 Sample Player

MUSIC – SCORE WRITING
M67 Final Score (Mono)
M59 ST Score (Mono 1Mb)
M693 Schoenberg Composer

MUSIC – SEQUENCERS
M7 Accompany ST
M1 Midi Sequencer
M58 16 Track Sequencer

MUSIC – TRACKERS
M53 TBS Tracker
M30 Noise Tracker
M56 Equinox Tracker

MUSIC – YAMAHA
M72 QY10 Manager (Mono)
M73 SY22 Voice Ed (Mono 1Mb)
M50 DX/TX Voices
M39 Yamaha 40p Editor
M13 PSS 680/780/790
M10 FB01 Voice Ed
M9 TX812 Ed

MUSIC – OTHER
M65 Music Tutor
M55 Electric Chord Dictionary
M31 The Midi Guide
M52 Midi Music Maker
M40 Midi Xmas Songs
M14 Midi Channel Score (Mono)

PROGRAMMING – ADVENTURE WRITING
P52 TADS
P5 Adventure Writing System
P50 C Adventure Toolkit
P70 STOS Adventure Creator
P663 AGT
G95 AGT Companion

PROGRAMMING – ASSEMBLER
P54 Turbo Assembler (1Mb)
P15 68000 Assembler

PROGRAMMING C
P682 Heat N Serve C
P19 Sozoban C (2 Disks)
P51 C Information
P50 C Adventure Toolkit
P49 C Database Toolkit
P23 C Tutorial
P20 C Compiler
P17 C Programs
P8 Graded C Programs (2 Disks)

PROGRAMMING – GEM
P56 Professional Gem
P55 Gem Classics
P40 Gemdos Users Guide
P43 Hitch-hikers Guide to Bios
P14 Gem Information

PROGRAMMING – GFA
P652 V3 Graphics Source Code
P653 V3 Music Source Code
P73 Autozest (Mono)
P63 GFA Expert
P38 GFA Tutorial
P58 GFA User Source Code
P39 GFA V2 Programs

PROGRAMMING – STOS
P720 STOS Extensions
P727 Guide to Writing STOS Extensions
P675 STE Source Code
P75 Rasters + Borders Code
P70 Adventure Creator
P34 Command Reference
P22 STE Upgrader
P61 Stos Sound FX
P57 Stos Speaktex
P47 Stos Sound Tracker
P46 Shoot-'em-up kit
P45 Stos Programs

SATELLITES
U85 Weather Satellites
U53 Orbit, Gravism

SPEECH SYNTHESIS
U94 Digispeech
U74 Smooth Talker

SPREADSHEETS
U126 Sheet v3.2
U110 Gemcalc
U78 Sheet 2
U42 Opus 2000 (1Mb)
U30 ST Sheet

STE ONLY
A654 E Painter
G264 Labotomy Invaders (1Mb)
G260 Blat
STE1 DMA Sample Player
G681 Operation Garfield
M719 STE CD Player

TYPING TUTORS
U41 2 Typing Tutors

WORD PROCESSING
WP26 DbWriter (Mono)
WP1 ST Writer v4.8 + Spellcheck, Mailmerge, Word Count
WP10 First Word + Spellcheck + Mailmerge, Word Count
WP26 DbWriter (Mono)
WP11 Fastword
WP3 Disk Mag Maker
WP6 Printer Drivers
WP24 HP Drivers

OTHER DISKS
LU700 1001 Practical Money Making Suggestions – Price £2.95
U708 Calendars + Organisers
U702 Food + Wine
U721 Ponds + Water Gardens
U746 Creative Video Titles
U748 Chat XXX – Shares Trading

MT SOFTWARE

LOTS OF EXCITING PRODUCTS FOR YOUR ATARI ST/STE

Europe: add 10%. World: add 25%

TEL: 0983 756056
FAX: 0983 755800
Greensward House, The Broadway, Totland, IOW, PO39 0BX

MT SOFTWARE LEADING THE WAY IN THE UK

SOFTWARE PACKS

Each pack consists of 6 double sided disks

1 Pack = £9.95
2 Packs = £8.95 each
3+ Packs = £7.95 each

ADVENTURE GAMES
14 complete adventure games covering a wide range of subjects

ACTION GAMES
Shoot-em-up and action games – non-stop, mega, alien zapping fun

BUSINESS
For home or office – WP's, databases, spreadsheets, organisers, address books etc.

EDUCATION 1
Educational fun for 3-7 year olds – maths, spelling, music, colouring, etc.

EDUCATION 2
More educational fun for 3-7 year olds – lots of games here.

CLIP ART
Hundreds of images for use with your favourite desktop publisher

CALAMUS FONTS 1
Over 100 new fonts for use with Calamus DTP

CALAMUS FONTS 2
Another 120 new fonts for use with Calamus DTP (all tested)

ART – Requires 1Mb
Art programs, tutors, fractals, 3D, animation, virtual worlds, etc

MUSIC + MIDI
Sequences, music files, music tutors, sample players, midi info chart guides and more

STE – Requires 1Mb
STE Games, STE Art, STE Music, STE Demos, etc.

C Programming
Sozobon C, C Tutor + programs, graded programs and information – Teach Yourself C

GFA Programming
General tutorials, graphics and music, lots of source code – great pack

STOS Programming
What a pack – advanced graphics, music, speech, STE programming, lots of source code.

THE BEGINNERS GUIDE TO STOS BASIC

618 Page, ring bound course manual + 2 double sided disks















The Beginners Guide to STOS Basic introduces the reader in a step-by-step fashion to what is one of the most powerful and versatile programming languages available for the Atari ST range of computers - **STOS BASIC.**
The course takes the newcomer from basic principles through to the development of complete programs. A practical approach is adopted throughout with the emphasis being on using the computer rather than wading through reams of theory. Programming should be fun, and with this in mind, the course tries to cover as many interests as possible. It does not matter whether you are retired or still at school there is something for everybody. You will learn how to produce shoot-em-up games, art programs, junior educational programs, GCSE mathematics programs, databases, word processors, musical programs and much, much more.

GAMES: Learn how to produce simple word games through to full blown shoot-em-ups including sprites, collision detection, animation, etc.

GRAPHICS: Learn how to produce simple shapes/graphs through to full screen animation and special effects.

EDUCATION: Learn how to produce junior educational programs through to GCSE level mathematics programs. In fact the course includes a complete chapter for students studying GCSE mathematics and covers such topics as trigonometry, Pythagoras' theorum, calculations of areas and volumes, etc.

BUSINESS: Learn how to produce a simple word processor and databases that can be adapted for any application.

PLEASE NOTE:
You need the main STOS Interpreter to be able to use this course

XMAS SPECIAL
£29.95 + p&p
(Total price: £32.95)

SAVE £10 Normal RRP £42.95

EASY TEXT PLUS

A great DTP System that produces full A4 pages using a combination of fonts and Degas clip art. Create columns of text, add lines and rectangles, fill areas with different patterns – produce posters, letterheads, magazines, homework, etc. Complete with 88 page user guide & telephone support.

Only £19.95
(FREE CLIP ART)

FREE CLIP ART PACK WORTH £9.95



Award winning DTP Systems from MT Software

EASY TEXT PROFESSIONAL

Requires 1Mb memory

All the features of Easy Text Plus and much, much more – user defined page size, import and re-size various clip art, import WP documents, incorporate vector objects, headers, footers, columns, auto page numbering, etc. Complete with 135-page user manual and telephone support.

Only £39.95
(FREE CLIP ART)

Mr. Smart's BIG TIME

The largest suite of educational programs ever released for Atari ST/STE

Twenty five, yes 25!, educational games for 5-11 year olds.

Complete with video tape detailing the various games and how to use them

TWENTY FIVE SEPARATE GAMES

- ★ SPOKEN CLOCK
- ★ GRID WORK 2
- ★ TILL PLUS
- ★ PICTURE POP-UPS
- ★ SEA COLOUR
- ★ UP THE POLE
- ★ NUMBER FRIENDS
- ★ 12 HOUR CLOCK
- ★ GRID SUMS 1
- ★ TILL MINUS
- ★ WORD MEMORY
- ★ SHAPE MATCH
- ★ COUNTRY WIDE
- ★ 24 HOUR CLOCK
- ★ GRID SUMS 2
- ★ PICTURE SPELL
- ★ PICTURE MEMORY
- ★ STREET WISE
- ★ CITY SLICKER
- ★ GRID WORK 1
- ★ LOST LETTERS
- ★ WORD POP-UPS
- ★ SEA SHAPE
- ★ BODY BUILDER
- ★ SHADOW MASTER

EDUCATION IS FUN – SO LEARN WHILE YOU'RE YOUNG...















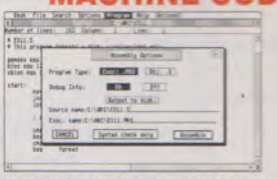


XMAS SPECIAL
£21.95 (inc p&p)

SAVE £3 Normal RRP £24.95

FREE Extra Code disk worth £5

INTRODUCING ST MACHINE CODE



A 400-page book plus disk that provide a complete introduction to machine code programming on the ST/STE.

LEARN ASSEMBLER THE EASY WAY – STEP-BY-STEP

The disk contains a text editor, assembler, debugger, resource construction kit and all the examples featured in the book.

XMAS SPECIAL – £19.95
WITH FREE CODE DISK

IMPRINT

For quality colour and mono printouts

Cut out the screen area you want printed and vary the printout size or print the full screen. Portrait or landscape possible.

Mono – Only £10.95
Colour – Only £15.95

FAMILY ROOTS

Family Roots is the program for anybody interested in Genealogy

Family Roots uses a unique combination of screen graphics and integrated database with full printer support.

Only £24.95

DISKS & ACCESSORIES

10 Blank Disks	£4.95
25 Blank Disks	£11.95
50 Blank Disks	£21.95
100 Blank Disks	£37.95

includes P&P and labels

ST/STE Falcon Dust Cover	£3.95
Deluxe Mouse Mat	£2.95
Mouse/Joy Ext Lead	£5.95
100 Standard Disk Labels	£3.00
100 Tractor Disk Labels	£3.00
200 Address Labels	£4.00

SPECIAL ACCESSORY PACK

- ★ 25 Blank Disks £11.99
- ★ Atari Dust Cover £3.95
- ★ Deluxe Mouse Mat £3.95
- ★ Mouse/Joy Ext Lead £5.95

Normally £25.80
XMAS SPECIAL – ONLY £21

PD SCENE

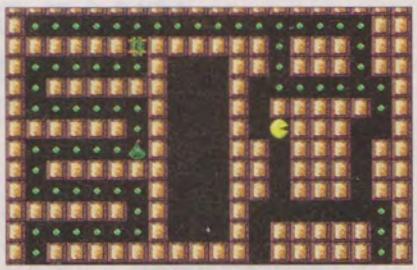
Want some games for little more than the cost of a disk? Then read on as Nial Grimes serves up another bumper selection...

H-MEC 2

GOODMAN INTERNATIONAL • DISK NO: GD.2057 • £2.75 • MEMORY: 1MB • PUBLIC DOMAIN • STE ONLY • FALCON-COMPATIBLE

IN BRIEF: Public domain *Pacman* clone number 2,000,001 has arrived. It's wrapped in nice STE packaging, has just a small tot of originality and is called *H-Mec 2*. So what does it have to offer?

Well, the plot remains as per the original – waltz around a maze popping power pills for all you are worth and avoiding ghosts. When the play-area is cleared of suspicious substances you are whisked off to the next level; same idea, new colour scheme.



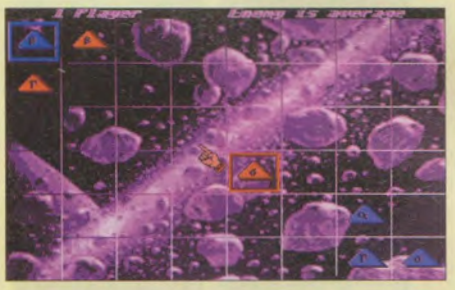
If you've mastered H-Mec 1, now is a good time to pick up the sequel. It's every bit as playable...

The twist (more of a curl really) that *H-Mec* offers is a scrolling play area. It's split over two screens and the STE is put through its paces to keep things nice and smooth. A jolly little demo tune accompanies each level and the graphics hit the perfect medium between originality and quality. The levels seem just a touch easier than the first incarnation, which has got to be good news for beginners.



The bonus game – "Oh No, Not More Radioactive Mineshafts" – lacks any graphical niceties, but it's very playable indeed.

ST REVIEW COMMENT: "Wow – it's another *Pacman* clone! The intelligent ghosts and polished presentation make it well worth consideration, but whatever happened to the sound effects?"
✪✪✪



The whole game has a very Trekkie atmosphere although there's precious little game-play to back it up.

TRIADS

MERLIN PD • DISK NO: BY NAME • £1.25 • MEMORY: 0.5MB • SHAREWARE

IN BRIEF: *Triads* is a digital board game based loosely on Star Trek. Each player starts out with four pieces and the idea – funnily enough – is to battle it out until your colour rules the board.

There are no movement restrictions as such and you can attack from the very first move if you want to. When a piece lands on an enemy square the screen switches to the battle arena which takes the form of a duel between two spaceships. Be warned, it's hardly *Xenon* material, and becomes pretty tedious after the first few encounters.

An element of strategy might improve things, but unfortunately there's none to be found – you know that every game is going to end up with exactly the same four action sequences. Once they are mastered there's little reason why you'd want to play the game again.

ST REVIEW COMMENT: "*Triads* has the makings of a good game, but it can be completed on the first attempt and as a result has very little long term playability. A shame, because it could easily have been so much more."
✪✪✪



The action sequences take the form of a space duel. It's great fun for the first few games.

JIGGSY

NEW AGE PDL • DISK NO: GAME.145 • £1.50 • MEMORY: 0.5MB • PUBLIC DOMAIN

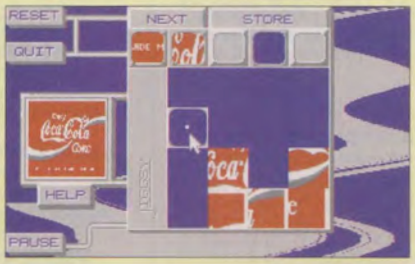
IN BRIEF: Sliding puzzles have been with us since the dawn of time, but *Jiggsy* proves that the concept has got some way to go before biting the dust. The aim of the game is to complete a picture by picking pieces up as they fall from the sky and dropping them into position. "Easy" you might say, but the sting in the tail is gravity because as you move each block, all others above it fall downwards. This calls for one rather large dollop of strategy and it can seem almost impossible on the first attempt.



Jiggsy plays as good as it looks, and it looks very good indeed.

When the last piece appears, you have a few precious seconds to finish off the scene or it's back to level one and start again. The game can be played blind or with the help of a "guide picture" (thank goodness!).

ST REVIEW COMMENT: "It's tempting to label *Jiggsy* an educational title, but start playing and the kids won't get a look in! It really is very addictive and the presentation is well above average."
✪✪✪✪



Piece together the picture as the pieces fall from the ceiling and you'll be whisked instantly to the next level.

OSCAR BURMAN GAMES

FLOPPYSHOP • DISK NO: GAM.3675 • £2.50 • MEMORY: 0.5MB • PUBLIC DOMAIN

IN BRIEF: If you are a fan of puzzlers, Oscar Burman's first collection of games is definitely worth a look. First up is *Sirtet*, which is a straightforward *Tetris* clone. There's no attempt to jazz up the idea at all – just drop those shapes into place and prepare to be beaten hollow by your Gameboy-owning cousin. The second game, *Plumber*, raises the pace to a more acceptable level being an out and out *Pipemania* clone.

Picker steals the show, though. The concept is very similar to *Swap Tiles*, the idea being to clear a grid of pills without getting yourself marooned on a stray tile.

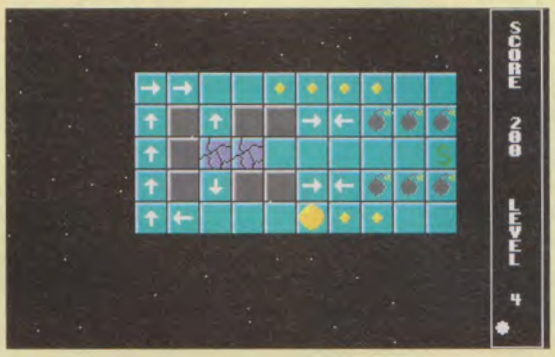
All of the games play quite well, despite the drab visuals, but the sound is inexcusable, even for a STOS game. The statutory disk fillers arrive in the form of *Planet Man* and *U-Boat*, which are definitely best forgotten.

ST REVIEW COMMENT: "If you ignore the graphics and sound, there are some great games in this collection. After all, *Tetris*, *Pipemania* and *Swap Tiles* clones for £2.50 can't be bad."

★★★★



The concept may be old, but no-frills Tetris still plays like a dream.



Picker's look isn't as clever as Swap Tiles, but it's just as addictive and slides down nicely alongside the other four games in the collection.

TRACKBALL

ATARI ST REVIEW BUDGET BUY

LAPD • DISK NO: G.322 • £1.50 • MEMORY: 1MB • FREEWARE

IN BRIEF: *Trackball* is a puzzle game along similar lines to *Pipemania*. The aim is to guide a set number of ball-bearings from the release point at the top of the screen to a coloured target way down below. Junctions are used to control the direction of flow and can be changed by simply clicking on them with the mouse.



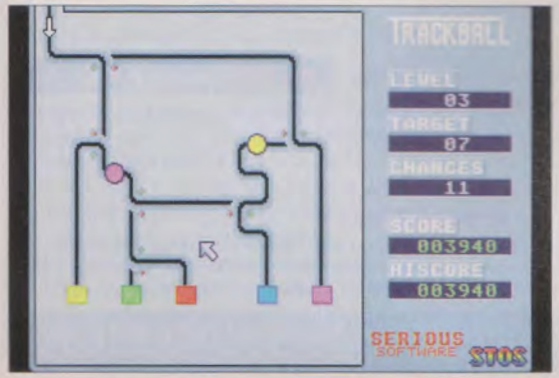
Trackball is a very challenging game with a few welcome sparks of originality.

The first few levels are easy – only one ball is released at a time and the obstacles are trivial. Beyond the gentle start though, the pace hots up very quickly; the first addition is an extra ball and then auto-junctions, one-way straights and colour changers follow quickly afterwards.

Some levels are oriented more towards an arcade/reflex angle, while others are more brain-teasing. Very often it's easy to see what you've got to do, but actually executing your master plan is a different matter altogether. The gameplay is backed up with some sound samples, although the quality is pretty dire.

ST REVIEW COMMENT: "Shades of *Pipemania* and a red hot pace – what more could any self-respecting puzzle fan ask for? The game isn't as smooth as some, but it's very playable and frighteningly addictive."

★★★★★



Controlling half a dozen junctions is easier said than done with five light-speed ball-bearings on your hands.

Lengthy text descriptions are very well written and full of atmosphere.


After fumbling with yourself for a while you decide that you are indeed a male of the species although of which species you are not sure. Especially not in the condition you are in. You take a deep breath and try to begin the day in a positive sort of way. It might be a good idea to wash the vomit out of your hair, have a shave and brush your teeth. What on earth were you eating last night? Your breath smells as if you've eaten a raw camel.

The extremely small room in which you spent last night turns out to be your newly installed shower. It is not a nice sight. You really shouldn't have drunk that much liquor at the party. Or have eaten all of those hors d' oeuvres. The shower itself is only a couple of square feet in size but ample for you to climb in out of. The man who came to fit the shower a few weeks ago said that it was the top of the range and guaranteed for 50 years against failure of any kind. Not suprisingly the company he worked for went bust as 500,000 angry shower owners demanded compensation. This shower has worked better that the other 499,999 for the first day but has been inconsistent since - unable to work out if it was broken or working. There used to be a plug in the floor but you wisely decided to remove it after the shower kept flooding the bathroom (a design fault, probably). A pressure pad on one of the shower's walls supposedly turns the water on and off. Peering out, through torn shower curtains, you see the bathroom. The floor of the shower is covered in something which is yellow and not at all nice.

OPERATION BLUE SUNRISE

NEW AGE PDL • DISK NO: GAME.148 • £1.50 • MEMORY: 1MB • SHAREWARE

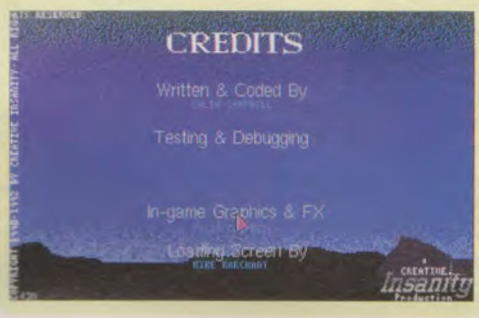
IN BRIEF: Way back in the mists of time when the ST was nothing more than a twinkle in Atari's eye, adventure games were all the rage. Nowadays they're less popular, but a good one like *Blue Sunrise* can still send a shiver of excitement running down your spine.

In common with all good adventures, no idea of the plot is given and instead you are left to feel your way around. The game starts in the bathroom and the first problem is to find a way to get yourself showered and cleaned before emerging into the bedroom. A strong thread of Hitchhiker-style humour weaves itself through the plot.

The game stands out from the crowd in a number of ways. For a start, it features plenty of lifelike characters to talk to, and you can also opt to play a male or female character. The responses will be different depending on which sex you choose, so effectively you have two different games to master.

ST REVIEW COMMENT: "*Blue Sunrise* may lack graphics but it's got atmosphere by the lorry-load and is superbly written. Rookies may find it a bit hard going, but for die-hard Infocom fans it's nothing short of perfect."

★★★★



Take a nostalgia trip in the capable hands of Operation Blue Sunrise – those were the days...

IMPROVE YOUR KNOWL

Learn more about your ST, DTP or programming with our great new book offers

1 THE ATARI ST EXPLORED

BY JOHN BRAGA AND MALCOLM McMAHON • £9.95

Ideal for the beginner to computing with the ST. It covers the operating system including GEM, GEMDOS and BIOS, and has a very useful guide to choosing a programming language. Essential reading for anyone who owns, or is considering using, an ST or STE.

2 THIS IS DTP! – A YOUNG PERSON'S GUIDE

BY TERRY FREEDMAN • £9.95

Designed to ease you into the real world of desktop publishing. It shows you how to take advantage of a range of packages from shareware to commercial and covers practical exercises as well as a full explanation of the general principles of DTP. An invaluable addition to the manual that comes with your software.

3 ATARI ST BASIC – PROGRAMMING BY EXAMPLE

BY DR GRAHAM McMASTER • £14.95

Every ST owner has a copy of *ST BASIC* – it comes free with the computer! Here's a book that will help you get the most out of the program. No previous programming experience is required.

4 C-MANSHIP COMPLETE

BY CLAYTON WALNUM • £14.95

All of Clayton Walnum's tutorials, previously written for *Analog Computing* magazine in the USA, have been compiled into one volume, edited and updated. If you've ever wanted to program in C or improve your skills, then this is the book for you. Almost 400 pages of instruction, explanation and education.

5 THE ST ASSEMBLY LANGUAGE WORKSHOP. VOLUME 1

BY CLAYTON WALNUM • £14.95

Starting from the basics, Clayton takes the reader through the art of 68000 programming from the most commonly used instructions all the way to handling disk files, printers, graphics and more.

6 THE COMMERCIAL GAMES PROGRAMMER'S GUIDE

BY DAVID GIBBON • £9.95

So you want to be a successful games programmer? Then this book is a must – it's a complete guide to producing and marketing your mega game!

7 A PRACTICAL GUIDE TO TIMEWORKS ON THE ATARI ST

BY TERRY FREEDMAN • £16.95

A complete guide to getting the most out of *Timeworks* on the ST. The book has step-by-step guides explaining design techniques and specific project ideas to help you improve the appearance of your work and advance to more detailed projects.

8 THE MIDI SURVIVAL GUIDE

BY VIC LENNARD • £6.95

Want to get started in music on the ST? Here's the perfect book for you, written by Vic Lennard, editor of *ST Review*. It's filled with over 40 informative diagrams of how to set up a MIDI system, and written in a friendly, down-to-earth manner.

9 OVERCOMING DTP OBSTACLES ON THE ATARI ST

BY PAUL COOPER • £12.95

Provides a wealth of useful information to anyone considering setting up in DTP with an Atari, using all the main DTP packages as examples.

MANUALS AND UPGRADES

Yes – you can still get the manuals and upgrades from our super cover disk offers...

Easy Money manual £7.99
Easy Money Plus upgrade ...£19.99
The Biz Plus upgrade.....£79.99
Prospero C Programming in C/ Using the Libraries manuals £24.99
Prospero C AES/VDI manuals £24.99
Prospero C All four manuals£39.99
Easy Draw 2 manual £12.99
Easy Tools 2 manual.....£9.99
Write On! manual £14.99
Easy Base manual.....£14.99



THE ATARI ST EXPLORED	£9.95
THIS IS DTP! – A YOUNG PERSON'S GUIDE	£9.95
ATARI ST BASIC – PROGRAMMING BY EXAMPLE	£14.95
C-MANSHIP COMPLETE	£14.95
THE ST ASSEMBLY LANGUAGE WORKSHOP	£14.95
THE COMMERCIAL GAMES PROGRAMMER'S GUIDE	£9.95
A PRACTICAL GUIDE TO TIMEWORKS ON THE ATARI ST	£16.95
THE MIDI SURVIVAL GUIDE	£6.95
OVERCOMING DTP OBSTACLES ON THE ATARI ST	£12.95
EASY MONEY MANUAL	£7.99
EASY MONEY PLUS UPGRADE	£19.99
THE BIZ PLUS UPGRADE	£79.99
PROSPERO C: PROGRAMMING IN C/USING THE LIBRARIES	£24.99
PROSPERO C: AES AND VDI	£24.99
PROSPERO C: ALL FOUR MANUALS	£39.99
EASY DRAW 2 MANUAL	£12.99
EASY TOOLS 2 MANUAL	£9.99
WRITE ON! MANUAL	£14.99
EASYBASE MANUAL	£14.99

✓ DELIVERY – FREE

CREDIT CARD ORDER LINE – 0480 891171 OR FAX YOUR ORDER – 0480 890787

TO: *ST REVIEW* BOOK OFFERS, PLEASE RUSH ME THE ITEM(S) AS TICKED IN THE BOX OPPOSITE.

I ENCLOSE TOTAL PAYMENT OF £_____

PAYABLE BY: ☐ CHEQUE ☐ P.O. ☐ CREDIT CARD

NAME: .....

ADDRESS: .....

.....

POSTCODE:..... TEL (DAY): .....

VISA/ACCESS/MASTERCARD/DELTA/SWITCH NUMBER:

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ EXPIRY DATE: /

SWITCH ISSUE NO. /

SIGNATURE: _____

IMPORTANT!

Paying by CHEQUE or POSTAL ORDER – please make payable to GO DIRECT and write your cheque card guarantee number on the back. All prices are inclusive of postage & packing and VAT. Please allow 28 days for delivery from when we receive your order. For non-receipt of goods phone 0480 891171, Monday to Friday between 10am and 6pm.

Send your order to: ST REVIEW BOOK OFFERS, 7 VINEGAR HILL, ALCONBURY WESTON, HUNTINGDON PE17 5JA

OGE THE ST REVIEW WAY!

To go with our unique booklist, Iain Laskey reviews three from Kuma Computers...

C-MANSHIP COMPLETE

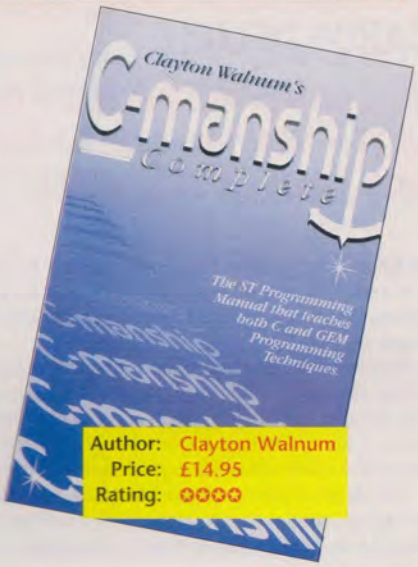
Atari veterans may remember Clayton Walnum from *A.N.A.L.O.G.* magazine for which he was a regular contributor. When he moved onto the ST, his regular C-manship column introduced many people to ST programming. This book contains all those articles in an updated form plus a wealth of new information to provide a valuable programmers resource.

The first few chapters introduce the C programming language. The basics are covered adequately with all the common elements and usage of C described in a lucid manner. Well annotated listings are used regularly to good effect.

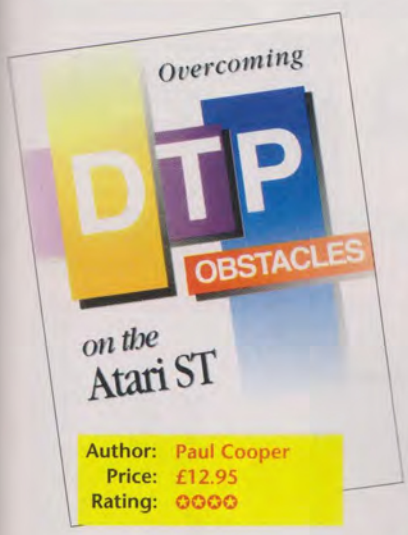
Next comes the VDI and two fairly sizeable examples of VDI graphics and text effects. GEM is introduced via the file selector and alert boxes before moving on to dialogue boxes. All the underlying structures and details are covered. At this point it is assumed the reader has Atari's own resource construction kit, RCP, and a rather wasteful four pages are taken up describing how to create a dialogue box with this package. Four chapters devoted to windows covers drawing, sizing, the rectangle list and sliders in a very competent manner.

After windows, a *Degas* picture viewer and home finance program form the bulk of remaining space along with animation techniques, the internal clock, desk accessories and more.

Overall the book is very good and covers a lot of ground. The writing style is very friendly with clear examples and listings. On the downside, the examples use *Megamax C* and Atari's developer kit – an unusual combination – and *Lattice C* users will need to change many of the GEM examples to get them to compile properly. None of the recent additions to hardware and operating systems are covered.



Author: Clayton Walnum
Price: £14.95
Rating: ✪✪✪✪



Author: Paul Cooper
Price: £12.95
Rating: ✪✪✪✪

OVERCOMING DTP OBSTACLES ON THE ATARI ST

First impressions were not good – two spelling mistakes within minutes of picking it up and an amateurish layout with an overly large typeface gives the impression that you are not going to learn much from the author. The book has been produced using *Timeworks 2* although it also covers *Calamus*, *Pagestream* and *Easy Text Professional*.

It soon became apparent that there was more to this book than initial impressions indicated. The author has obviously used his system for some time and, through trial and error, has found his way around all the problems that anyone new to DTP would come across. He recommends many firms and products that can help and monitors, scanners, RAM upgrades, processor upgrades and even flopticals all get a mention along with details of their benefit to DTP users. Unfortunately, prices have been quoted in many cases and these will rapidly go out of date.

Good working practices along with how to get the best output at the cheapest price whether it be a one-off or a magazine print run are all examined in a brisk but clear way.

The legal aspects are detailed including VAT thresholds, contracts and what is publishable in terms of content and copyright. Even Salmen Rushdie gets a mention!

The rest of the book is devoted to the different packages available and how to get the best out of them while creating various types of document.

The book's content is surprisingly good given its appearance. It provides a wealth of useful information to anyone considering setting up in DTP with an Atari. The example pages are well laid out so quite why the book looks as bad as it does is a mystery...

A PRACTICAL GUIDE TO TIMEWORKS ON THE ATARI ST

This book proudly proclaims that it was produced using a 1040STE, *Timeworks 2* and various other Atari software packages. Based around *Timeworks 2*, it is in the form of several tutorials spread over seven projects. Each is designed to add new skills and concepts while reinforcing existing ones and apparently provides all the skills necessary to pass the CIT and RSA CLAIT examinations.

It starts right at the beginning with tips on installation and memory optimising, and mentions other programs that may be useful such as *Trimfont*.

Style sheets are the key to effective use of *Timeworks 2* and these are dealt with next along with general setting up of a printer and automatic timed backup. Frames are thoroughly covered before starting on the projects.

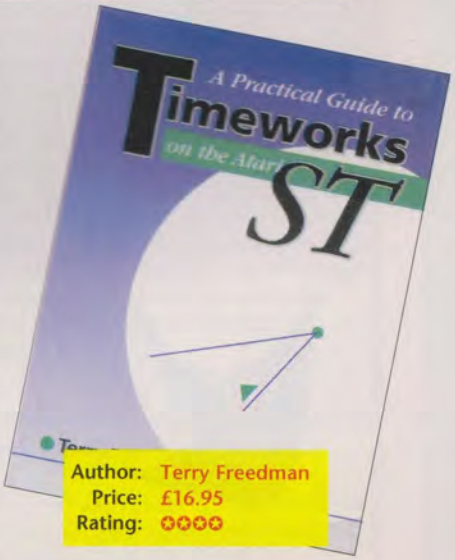
The first project is a single page document – text preparation using a word processor and how to embed tagging information to ease the final page production. Next, Text Mode is examined along with using fonts and font styles. Paragraph mode is then covered along with paragraph styles and more on fonts.

Style is well catered for with the concept of a non-fussy house-style being introduced – simplicity is the keyword here.

Later projects add more features and build on previous work. Tables, frame tinting and drawing tools all receive the usual clear explanations. As each project evolves, all the abilities and functions of *Timeworks 2* are dealt with in turn until a good solid grounding has been obtained.

A quick reference guide rounds things off with basic page designs and information on cropping, drop caps and other details.

Overall the book is a worthwhile addition to the *Timeworks 2* manual and forms a solid backbone of knowledge to work with. The layout looks a little unprofessional but the illustrations are copious and useful.



Author: Terry Freedman
Price: £16.95
Rating: ✪✪✪✪

PD ZONE

CARDS DELUXE

GOODMAN INTERNATIONAL • DISK NO: GD.2123 • £2.75 • MEMORY: 0.5MB • SHAREWARE • HI-RES ONLY • FALCON-COMPATIBLE

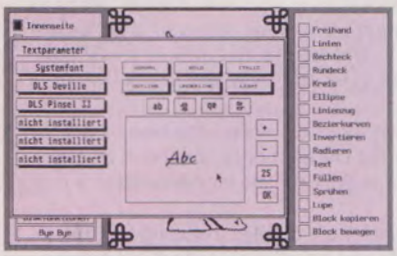
IN BRIEF: Everybody needs a business card at some time or another, be it to give your company an image or just to impress a girlfriend. If you could do without the hassle of getting involved with DTP, *Cards Deluxe* would be an ideal solution.

Having made your way through the introductory details, the main operations screen appears. To the left sit the disk functions, to the right the drawing tools and the card itself takes pride of place in the centre. Although all of the prompts are in German, it's very straightforward to use and a few seconds' worth of experimental clicking will soon put you on the right path.

The program uses standard GEM fonts (loaded directly, not through GDOS) and plenty are supplied together with an editor. The print quality isn't up to that of a desktop publisher, but it's acceptable and very fast.

ST REVIEW COMMENT: "*Card Deluxe* is a very polished piece of software that does its job extremely well. The print quality could be better, but if you're that worried you really ought to be using a desktop publisher anyway!"

★★★★



The maximum resizing of 25 points is plenty big enough for most business card designs.

GUTENBERG

ATARI ST REVIEW BUDGET BUY

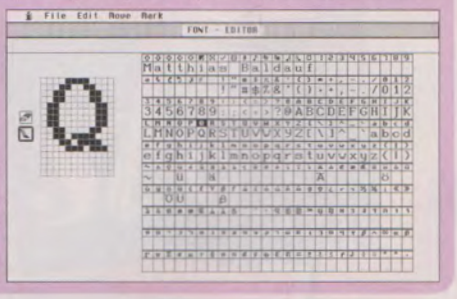
TUMBLEVANE • DISK NO: WPD.26 • £1.50 • MEMORY: 0.5MB • SHAREWARE • HI-RES ONLY • FALCON-COMPATIBLE

IN BRIEF: *1st Word* and *Word Writer* are nice little packages, but do you ever get the feeling that they don't really do your printer justice? If so, then whisk yourself down to your local PD emporium and pick up a copy of *Gutenberg* – liquid nitrogen for your 9 pin printer.

The package will load any text file in *1st Word* or ASCII format and print it at near letter quality using the font of your choice. A dozen or so are included on disk to get you kicked off and the editor allows new designs to be created with ease. Proportional spacing is supported, but can be disabled if you need to preserve the formatting of the original document. The whole thing is driven through an intuitive GEM interface and a mono emulator is supplied for TV users.

ST REVIEW COMMENT: "*Gutenberg* is a great way to improve the look of your *1st Word Plus* documents. The Mac-style fonts really do extract the best from a 9-pin printer."

★★★★★



When the bundled fonts have lost their appeal, load up the font editor and design a few of your own!

GHOSTSCRIPT

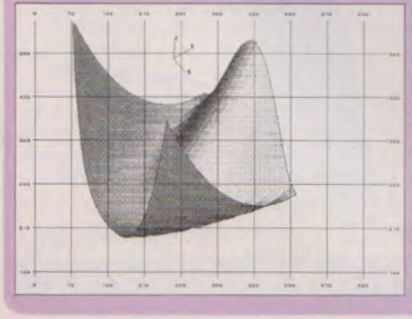
ATARI ST REVIEW BUDGET BUY

FLOPPYSHOP • DISK NO: LAN.73 & LAN.76 • £5.00 ALL IN • MEMORY: 1MB • FREEWARE • HARD DISK RECOMMENDED • FALCON-COMPATIBLE

IN BRIEF: For the most part, the ST is thankfully a PostScript free zone, but what happens when you come across a public domain book in the infamous PS format? Well, the usual procedure is to go crawling to friend and beg the use of an expensive Adobe-licensed printer, but with *GhostScript* on your hard disk you needn't bother.

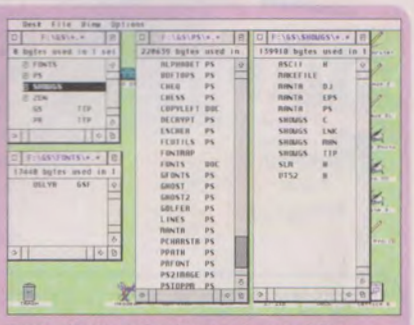
This clever little utility hides under the name of a PostScript interpreter, which basically means it takes PS files and dumps them to a number of "normal" printers. Only one thing stands between you and perfect printouts and that's the installation, which is decidedly tricky. After wading through mountains of documentation it transpires that the fonts should be stored in a folder called FONTS and the PostScript code in a PS folder. Both should be in the same place as the GS program itself.

Once this set-up exists, it's just a case of running *GS.TTP* and entering the PostScript file to process. Owners of TOS 2.06 and above have things even easier – just drag the file over the GS icon. After several minutes you'll find a file called *PRN_1000* on the disk which can be double-clicked and printed from the desktop. It works with DeskJet and Epson-compatible printers and a utility is also supplied to display PRN files on screen should you wish to do so. Several examples of PostScript artwork are also crammed on the disk, but be prepared to wait a while for the larger images.



ShowGS allows printer-ready GhostScript files to be displayed on-screen.

Compatibility seems to be fairly good. It will handle both EPS and PS files without complaining and public domain books such as *Zen and The Art of The Internet* print perfectly, although you do need plenty of disk space to store the temporary printer files. Apparently it even conforms to part of the PostScript level 2 standard and the only real complaint is the way it forces the DeskJet to spit out a blank sheet of paper after every page – sooo irritating!



Installation is the main problem a prospective GhostScript user will face. To save you some of the hassle, here's the required directory structure.



Once the interpreter has finished its job, just drag the PRN file to the printer icon and prepare yourself for a perfectly laid out page.

ST REVIEW COMMENT: "If you ever come across PostScript, *GhostScript* is a godsend. A bit of a fiddle to set up, but a dream to use once installed. It seems to be compatible with most versions of PC PostScript, although Mac files can pose more of a problem."

★★★★★

B-STAT 2.47

GOODMAN INTERNATIONAL • DISK NO: GD.2116 • £2.75 • MEMORY: 1MB • SHAREWARE • FALCON-COMPATIBLE

IN BRIEF: *B-Stat* is a complex statistical analysis program. In a nutshell, it will take any set of figures and turn them into a very deep, meaningful graph. You'll be pleased to learn that it's reasonably easy to use, although the plethora of different menu trees can make it feel a little hostile at first.

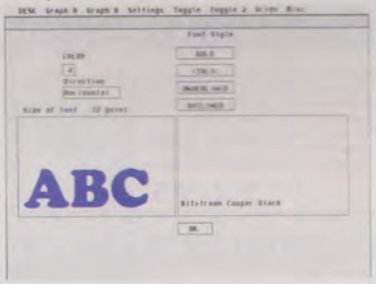
Once the data has been entered, it can be graphed in a huge number of ways – 3D pie charts, histograms, floating bar charts... you name it. The program also boasts a huge range of statistical analysis options, most of which are as powerful as they are unpronounceable. The program runs very nicely under *SpeedoGDOS*, supporting colour fonts and fully adjustable point sizes, but you'll need at least 2Mb of RAM.



A huge range of different graph styles are available, including the ever-popular 3D pie-chart.

ST REVIEW COMMENT: "*B-Stat* is probably the best statistical analysis program for the ST. The interface is slowly losing its tacky feel, but it's got just a little bit further to go before it could be considered intuitive."

★★★★



B-Stat deals admirably with SpeedoGDOS, handling colour and scalable fonts like a true professional.

COMPACT DIRECTORY

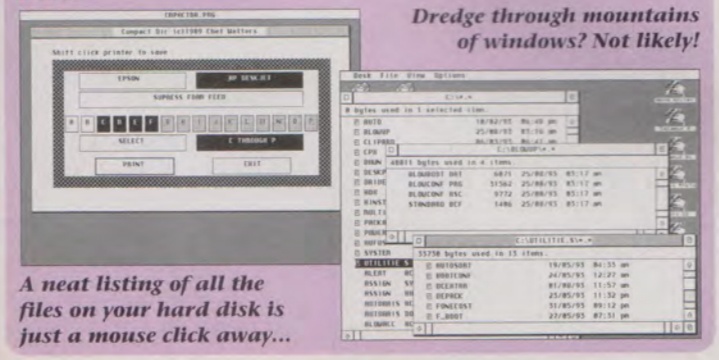
TUMBLEVANE PDL • DISK NO: UTA.56 • £1.50 • MEMORY: 0.5MB • SHAREWARE

IN BRIEF: *Compact Directory* takes a complete list of all the files on a hard disk partition and dumps it to your printer at the smallest point size possible. It currently supports Epson compatibles and the HP DeskJet, which must cover at least 90% of the ST community. The printouts adopt a four column layout which is quite clear despite the minute size and a huge number of files can be squeezed onto a single page. My particularly crowded boot partition containing over 800 files was squeezed onto just four sheets of paper!

"But what good is it?" I hear you cry. Well for a kick off, it's much easier to wheedle out unneeded files with a hard copy in front of you and it's also a valuable companion to back-up sets. A simple point-and-click interface makes the program a doddle to use and all available partitions can be dumped from a single button.

ST REVIEW COMMENT: "You'd be surprised just how handy *Compact Directory* is. Within minutes of printing out the first listing, you'll notice half a dozen non-essential files and free up lots of space on your hard disk!"

★★★★



Dredge through mountains of windows? Not likely!

A neat listing of all the files on your hard disk is just a mouse click away...

TOP TEN PRINTING UTILITIES

1 GHOSTSCRIPT • FLOPPYSHOP • DISK NO: LAN.73 & LAN.76 • £5.00 ALL IN • MEMORY: 1MB • FREEWARE • HARD DISK RECOMMENDED • FALCON-COMPATIBLE

Print PostScript files the economical way with GhostScript. It deals with most varieties of the language and will output to any Epson FX or DeskJet printer. The interface lacks sparkle, but at £5 for the whole set-up it's got to be worth the small amount of hassle.

2 CARDS DELUXE • GOODMAN INTERNATIONAL • DISK NO: GD.2123 • £2.75 • MEMORY: 0.5MB • SHAREWARE • HI-RES ONLY • FALCON-COMPATIBLE

Fancy giving your business a new image? Cards Deluxe just laps up the multiple fonts and trendy layouts required by modern business cards. In terms of output quality it isn't perfect, but the interface is pretty damn close.

3 OPUS 2.2 • EMERALD CITY • DISK NO: SN.31 • £2.50 • MEMORY: 1MB • SHAREWARE • FALCON-COMPATIBLE

If you're looking for a powerful spreadsheet, with an emphasis on graphing, the Opus is the kiddie to go for. The documentation supplied is superb and a GEM interface makes it quite easy to use, despite its power. GDOS is used for output, but it seems unable to cope with Speedo...

4 B-STAT 2.47 • GOODMAN INTERNATIONAL • DISK NO: GD.2116 • £2.75 • MEMORY: 1MB • SHAREWARE • FALCON-COMPATIBLE

B-Stat is the best statistical analysis package for the ST, full stop. The latest versions brings with it *Speedo* compatibility, a slightly more logical interface and *Excel 2* file support. All in all, a very effective package.

5 THAT'S WRITE FX FONTS • THE ST CLUB • DISK NO: FON.150 • £1.45 • MEMORY: 1MB • SHAREWARE • FALCON-COMPATIBLE

A lovely little selection of converted Calamus fonts for all you *That's Write* fans. As the name suggests they are designed to be used with Epson FX printers and are all quite practical. Full instructions are included to get you up and running.

6 ANIMALS CLIP ART • THE ST CLUB • DISK NO: SSM.87 • £1.45 • MEMORY: 0.5MB • PUBLIC DOMAIN • FALCON-COMPATIBLE

Everything from snails to vultures are given an airing in this collection of IMG clip art. They are all realistic, not cartoony in style, and pretty good quality-wise. There are over fifty different animals to choose from.

7 GUTENBERG • TUMBLEVANE • DISK NO: WPD.26 • £1.50 • MEMORY: 0.5MB • SHAREWARE • HI-RES ONLY • FALCON-COMPATIBLE

Pep up the quality of your 9-pin printer, with *Gutenberg*. It transforms any text file into a beautiful looking near letter quality document and the standard of the supplied fonts is quite high.

8 COMPACT DIRECTORY • TUMBLEVANE PDL • DISK NO: UTA.56 • £1.50 • MEMORY: 0.5MB • SHAREWARE

Compact Directory helps to keep track of a crowded hard disk. It prints a beautiful four columned listing of all files on a partition and uses a very small point size, thus saving paper. It's dead handy for disk housekeeping and makes a valuable addition to any utility collection.

9 WORLD THEMES CLIP ART • THE ST CLUB • DISK NO: SSM.86 • £1.45 • MEMORY: 0.5MB • PUBLIC DOMAIN • FALCON-COMPATIBLE

Three countries are covered by this specialised collection of clip art – Egypt, Japan and the USA. A collection of maps covering Europe and the whole world are also included. The quality is quite nice overall, although the resolution could do with improvement.

10 CONNECTICAD DEMO • EMERALD CITY • DISK NO: SN.46 • £2.50 • MEMORY: 1MB • BANNERWARE • HI-RES ONLY • FALCON-COMPATIBLE

Take a taste of CAD-power with this superb demo from Germany. As bannerware it's limited in the save department, but the print facilities remain intact and it's also possible to dump your work to disk in IMG format.

TUMBLEVANE PDL

6 West Road, Dept STR, Emsworth, Hampshire, PO10 7JT
Telephone: Emsworth (0243) 370600

DISK PRICES: £1.50 each. unless otherwise stated

UTILITIES

UTA01: THE HITCHIKERS UTILITIES, which includes a document displayer, BOOTDRIVE, select which drive to boot from. BOOTWAIT, boot up both the ST and hard drive at the same time. BSSS, store boot sectors. CUSTOM, allows you to create disks of almost any format. DISKAT, database your collection and many more. With full manual.

UTA02: STICKER 3, create labels for your disks with a selection of icons that printout onto the label.

UTA03: FASTBASE DEMO, ICON, change your desktop icons. HEADSTART, auto boot any type of program from an auto folder. ON SCHEDULE, work schedule program with bells a very good printout routine.

UTA05: SUPERCARD V1.3, an index card database, easy to use and very fast search feature. Comes with a database of game cheats. CHEF, an electronic cookbook with 300 recipes each with cooking instructions and ingredients.

UTA19: TLC BOOK, an excellent on line address book and date reminder which holds up to 500 names and addresses. Has a good printout routine. DATABASE, a good database construction kit. SUPERBOOT, allow you to create custom bootup disk. TARADESK, a good PD desktop replacement program. COCKTAIL SELECTOR, a database of cocktails (600+).

UTA06: FASTCOPY 3, A-COPY, PRO-COPY and several other copying programs and utilities. ZAPMENU, a great way of launching programs from the desktop. ARCSYS, one of the better arc progs. PACK ICE, the other arc program.

UTA28: AWARD MAKER, a useful program for producing award certificates. Design your own or use one of the 120 already on the disk.

UTA34: DB MASTER 1, this has got to be the best answer to your database problems, design and configure your own! Very easy to use.

UTA36: DATA EDITOR, enter your data and the program turns it into easy to read graphs. PIE, BUBBLE, OPPOSED BARS, FLOATING BAR, 3D BAR. STAR BAR graphs can be produced, stored and updated at any time. Many students have used this program for their course work.

UTA37: WG DATA, another database, but for younger users to learn how to construct and use a database. For the 11+. DATABASE CONSTRUCTION SET, a powerful program that allows the user to design your own way of processing information. SANDP, a newsletter/magazine program.

UTA39: IDEALIST V3.1, a versatile program for printing out text and offering lots of helpful functions to use your print in clever ways. 4 selectable sizes, up to 9 columns, separate output of fonts and pages, editable headlines and includes fonts for dot matix and laserjets.

UTA40: CALAMUS SUPPORT DISK, METACON, converts Calamus fonts to Text metafonts. FASTPRT, accessory to speed up printing to the HP laser. GUNTH, sample graphics in outline format. LASLABEL, template for printing 3.5 inch disk labels. CANON printer driver for the BJ10E.

CAL_FNT text file describing Calamus font format. HPDJPTCH, a patch for the HP deskjet printer and a few other small programs.

UTA43: A disk full of accessories and utilities, ideal disk for those who do not wish to buy a disk for each type of utility.

UTA45: MAILMERGE, a good program for those with a WP package without this utility.

UTA46: INVENTORY PRO, an easy to use inventory system and stock control for the small business.

UTA48: SAGROTAN V1.14, THE VIRUS KILLER in the PD world.

UTA51: 70,000 word dictionary, replace your standard spelling checker with this and you will be onto a winner.

UTA52: FOOD AND WINE MENU MAKER, an excellent database that stores and prints out a menu for both wine and food.

UTA53: GERMAN TRANSLATE, one of the better translation programs that makes sense of those German documents on some PD disks. Does it all for you.

UTA55: HP CHROME, prints colour pictures in Degas and Neo format utilising deskjet printers. HYPERBASE, a multi media database, you can create windows holding test, graphics or sound and link them together. CLIPART, for use with Hyperbase. UNIPRINT, a Hi res Degas Elite printing program for 24 pin printers.

UTA56: HP DESKJET UTILITY DISK 1, printer drivers for use with 1st Word. ENVELOPE PRINTER, JETLABEL, JETSET, set parameters on your deskjet. LASERJET, print at 300 dpi and loads of other useful utilities.

UTA57: ASTUBANK, a personal accounts program that will tell you how much you can spend in any one month.

UTA58: HARD DISK UTILITIES, everything you need to look after and maintain your hard drive.

UTA60: MANUAL MAKE, a utility for putting together neat and tidy printed manuals.

DISK BOXES

- Store up to 100 3.5 inch disks in these high impact plastic boxes that protect your disks from dust and spilt COFFEE.
- Boxes lock to keep your data protected and secure.
- Boxes supplied with index dividers to organise your disks. Never lose another important disk!
- Boxes are portable, easy to carry and transport.

only £7.95 each

GAMES

GM05: Bermuda Race 2, Yacht racing at its best.

GM13: FMC trading, space trading game. Laserball & Regatta, sail against 10 other countries.

GM14: Football manager, lead the England team to victory, and Milegame, a great motor racing game played with cards.

GM16: Hardcore & Floyd the Droid, two blast everything in sight games.

GM21: Llamatron & Revenge of the Mutant Camels, as above but from the Master of such games, Jeff Minter.

GM26: Airways, Flight Sim (not a blaster).

GM27: Blaster, defender type game. Wheel of Fortune, as per the TV show. Monopoly & Pentominoes.

GM38: Pipe Perfect, build your pipeline before the flow starts.

GM40: Tennis, Plumb Crazy, build a pipeline again. Virus Killer, a so-so virus killer.

GM42: Penguins, a Lemmings type game with 40 levels. Great fun, good enough to be a commercial game.

GM43: Mystic Well, a very addictive Dungeon Master game from the USA with loads of levels and puzzles to sort out.

GM48: Crossword Editor, create and solve crosswords.

GM52: Battle for the Throne, a great RPG that takes some time to complete.

GM54: Bog, Fuzzball, Trivia, Time Bandit, Wall Street, Quizwiz & Yahtzee. Quizzes and blasters all on one disk.

GM69: Ozone, an award winning platform game that has everything in it, including a hang glider.

GM76: Master Break, good Breakout clone. Atom, Blaster & Spaceball.

GM75: Drachen, a 3D Mahjong game. Super Game, a good track and field game.

GM78: Violence, a very good Xenon type shoot-em-up game.

GM82: Smash Hit Tennis, tennis at its very best.

GM87: Pub Games, Pool, Darts, Cribbage, Pontoon and Checkers.

GM88: Hunt for Grey November, control your hunter-killer plane in its search for rogue sub's.

GM97: Fatemaster, a great arcade romp on an alien planet with an alien super spy. 1 Meg.

GM106: Mindlock, another great quiz game from D. Cobbledick. 1 Meg.

GM109: Colour clash, from the same people who gave us Fatemaster, this time you need to use the grey matter as well as the trigger.

GM113: Galaxians & Mrs. Munchie, two blasts from the past. A Pacman clone and Space Invaders given a revamp.

GM114: Course Angler, a good game and a fun way to learn how to fish, no sitting around for hours once you know.

GM120: Brain Damage, D. Cobbledick at his very best. Watch your brain cell count drop as you fail to answer the questions.

GM121: Walls of Illusion, a new Dungeon Master type game with commercial quality graphics and gameplay. THIS IS A MUST HAVE.

INKJET REFILL PACKS

TWIN REFILL PACK FOR DESKJET AND BUBBLEJET
BLACK £10.00
COLOUR £11.50

TWIN REFILL PACK FOR THE HP HI CAPACITY
BLACK £16.75
COLOUR £18.00

TRI COLOUR PACK
A tri colour pack will recycle the three colour cartridges for the HP 500c or 550c three times... this would cost you around £100 in originals. Each pack costs just £21.00

We also stock bottles of ink. If you already have a syringe why not just purchase the ink.?

60ml bottle of ink. Refill Canon BJ printers four times or HP 500 two times for only £6.50

500ml, 1 litre and 5 litre size bottles also available. Please call for a quote.

CLEANING KITS
Each cleaning kit will clean out three cartridges ready for new colours to be injected. Each pack costs just £3.49

ART

AAG01: PALETTE MASTER art package. DEGASAVE, save the screen in Degas format. MANDEL, Mandelbrot prog. Plus a few other small progs.

AAG04: DALI V3.1, art package from France. Not much in the way of instructions.

AAG05: CRACKART V1.0, almost the last word in art packages comes with complete English manual. 1 Meg required.

AAG06: FRACTAL ZOOM, probably the fastest generator of fractals around. Full manual on the disk.

AAG07: A disk full of Fractal programs and utilities. A 3D CAD program. Full manual on disk.

AAG10: ST CAD, runs in Med or Hi res. DBANNER, printout 5 inch text along printer paper. REMINDER & MEMO & LOOKER.

AAG11: ANI ST, a great animation program that once sold for over £80.

AAG21: Picture Converter, a complete disk of picture converters. SHOWTRIX, display your art work with different fades between each one.

AAG22: PUBLIC PAINTER, an art package for mono monitor owners. On disk manual.

AAG26: PICTURE WORKS, load, save various picture formats and do amazing things with them.

AAG27: MINIDRAFT V1.10, easy to use CAD prog.

AAG28: MONOJC Viewer, copy clipart, add text and draw simple clipart, you can also print out and save in most formats.

AAG29: PAINTPOT, a simple and easy to use art package for half meg owners.

AAG35: CREATIVE TITLES, create titles for your Christmas videos, add the professional touch.

AAG38: CRACKART V1.36, the latest version of this excellent art package with several new features. 1 Meg.

AAG39: ATARI IMAGE MANAGER, whatever you need to do with images this is almost sure to do it. 2 disk set.

AAG43: GEMVIEW V2.30.

MOUSE MATS

- Save your mouse, protect it from dust and dirt and reduce the number of times you need to clean it.
- Get better control, give your mouse a smooth surface to run across with better traction.
- Protect your working area, durable nylon material protects your desk from scratches and prevents the mouse mat from slipping while you work.

£2.95

EDUCATION

EAC01: PERFECT MATCH, question and answer card game, MATHS TEST. For the under 10's. QUIZICAL, a good general knowledge trivia game.

EAC02: BODY SEARCH, designed to help children learn the human anatomy as required in elementary and junior school. THE SEARCH, a computer aided enquiry program. Search the village for info about the Gliggs family. MATHMAZE, a very good maths program that grows with the student. TRIVIA, another good general knowledge test, some of the questions are based on the USA.

EAC06: SHIPWRECK, an excellent maths program that combines graphics and easy and hard levels of play. The childs interest is held by turning the learning process into a game where correct answers help the character on the screen to escape his fate. HANGMAN, the old school room favourite that helps with spelling.

EAC07: ABOUT THE HOUSE, control a butterfly as it moves around the house. As it lands on various objects a description is given and some animation takes place. ME, displays four pictures of a task that must be placed in the right order, once this is done the scene is animated. Help the child undstand that most tasks need several steps to complete.

EAC09: CHUNNEL, a good French/English tutor. SPANISH VERB TUTOR, this program is designed to help you learn, revise or check the proper conjugation of Spanish verbs, can be initialized to communicate in French, English, Spanish or German.

EAC10: NOAHS ARK, a good game for teaching children spelling and word recognition. SPIDER SPELL, a very good spelling aid for younger children.

EAC11: MATHS MADE EASY, for the younger ST user, the program teaches maths in all four disciplines by talking to the user thus keeping interest levels high. GEOGRAPHY QUIZ, one for the slightly old user, the test is based on flags or capitals of the world.

EAC14: COLORAID, designed to give the younger ST user an insight into how a computer creates colour. AIKEN, design a man made from fruit, CREBUS writer allows the user to design and print rebuses, a rebus is a code in which pictures and symbols are used in place of words. Several other programs on this disk.

EAC18: THE WORLD, an excellent program that teaches you about and quizzes you on the countries of the world.

EAC19: PLANETARIUM, if you are into astronomy then this is for you. Pick a star from the map and click on it and all the info you want is there. It will also animate past or future events. Full manual on the disk. MONO.

EAC20: TELLTALE CHEMISTRY by E. Mills Bsc, PhD. An interactive program on the basics of chemistry, the program relates to GCSE grades A, B and C, good graphics & explanations of atomic structure, electron structure, formulae compounds, etc.

EAC21: CIA WORLD FACTBOOK, a four disk set of everything you want to know about over 240 countries. If you wnat to know how many people live in Albania, what the birth rate is, death rate, who they are upset with, where they sell their products or just about anything else then this is for you. A document display is also included on the disk. £5.00 for the set.

EAC29: WORKOUT V1.0, a general purpose learning aid for either question & answer tests or learning passages by heart. This program conforms partially to the C.L.T. guidelines on computers, language learning and may be of use in the classroom.

DTP & WP

WPD01: ST WRITER ELITE V4.1, an excellent WP package that works in all three resolutions.

WPD02: EASY TEXT + DEMO, a fully working demo of this DTP program but you can only print out the top quarter of any A4 page.

WPD03: TYPING TUTOR, teach yourself touch typing with this program, several levels of lessons have been built into the program.

WPD05: FIRST WORD, an excellent WP program that features WYSIWYG on the screen. 1ST WORD UTILITIES, help with 1st Word. DOUBLE TTP, print your text in columns. LARGEPRINT, lets you printout in large text.

WPD22: OPUS V2.2, a very good spreadsheet program with an excellent chart printout routine.

WPD14: CALAMUS MANUAL, your second manual for all those things that are not made clear in the official version. Written by a professional user of Calamus.

WPD15: PRINTER DRIVERS for 1st Word users covers just about every make of printer, comes with full installer & instructions. WORD COUNTER. WPTOOLS, a selection of WP utilities for 1st Word.

WPD18: PAGESTREAM FONTS, Postscript screen fonts for the following fonts:- Artistic, Creative, Hudson, Letter, Gothic, Oriental, Saturn, University and Roman.

WPD19: PRINTING PRESS V3.10, the closest thing to a full DTP program in PD. Also on the disk is a picture converter.

WPD22: PRINTING PRESS EXTRA'S, a disk for use with WPD19 containing extra fonts and clipart.

WPD23: DB WRITER V1.8, a very good WP program for Hi res users which can be used by both half meg and 1 meg machines. A manual on the disk gives a good guide to the program.

WPD24: DB WRITER SUPPORT DISK, includes a comprehensive thesaurus and a selection of dictionaries covering Medical, Legal, Computer and Biblical terms. You can also add your own with a utility on the disk.

WPD25: A utility for designing and downloading fonts to the STAR NL10 & LC10. Hi res only with loads of fonts ready to use. Can be used with an emulator.

WPD26: GUTENBERG PRESS, allow a 9 pin dot matrix printer to be used as a NLQ printer, load in ASCII files and print them out in high quality format and a selection of fonts.

MUSIC AND MIDI

MUM01: ACCOMPIANIST, a 16 voice sequencer for use with any model of ST, with room for over 10,000 notes, multi-recording with separate MIDI channels and a wide range of editing utilities.

MUM02: IN CONTROL, a user definable MIDI controller with over 20 sliders that can be programmed to control your midi instruments. SCONVERT, compress or expand sound samples.

MUM18: 1632 voices for use with the Yamaha DT/TX series of 6 operator synths with a file reader for loading the voices directly via the midi. A varied and useful range of voices on the disk.

MUM19: TRI-SOUND SEQUENCER, a chip/digi-chip 3 channel music sequencer.

MUM20: SAMPLE EDITING DISK, a disk full of useful programs for editing, sampling and converting. Also on the disk is a chip music tracker to create your own music.

MUM21: MIDIDRUM & MIDIPLAY, two useful programs for creating sounds with a drum machine and Midiplay is a basic sequencer. German documents with English version on disk. 1 meg and Mono.

MUM22: TX81Z V2.1, a mouse driven Yamaha TX81z editor. MIDIMOVER, a powerful midi file converter from Hybred Arts Freeware.

MUM24: ALCHIME Jr V2.22, this has got to be one of the best musical sequencers for the Atari anywhere. Comes with over 200 tracks for your use and has far too many features to list.

MUM57: FINAL SCORE, a graphic based fully WYSIWYG score writing program from Mainstream Music. Draw staves, line squares, 5 selectable score fonts, print preview mode, etc. Printer drivers now added for most makes of printer.

MUM58: ROLAND 'D' SERIES SOUND BANKS, a bank of tones for the D5, D10, D20, D110 and GR synths.

A CATALOGUE DISK with our complete range of software is available for just 50p with any order or for £1.00 without an order.

The disk has over 200k of free PD and a selection of secondhand commercial software for sale.

PICK 'N' MIX

Pick any 5 PD disks
For just £6.50
With this coupon
until 1st Feb 1994

LICENCEWARE

We also stock licenceware by Powerfist, Organised Chaos, Virusoft and HeavenSent.
All priced at £3.00 or less

POSTAL CHARGES

Please add the following amounts to your order

1-5 disks.....50p
6-10 disks..... 75p
over 10 disks.....£1.00

PD ZONE

CONQUEST

LAPD • DISK NO: L.60 • £3.00 • MEMORY: 1MB • LICENCEWARE

IN BRIEF: *Conquest* is a god game from the old school. The objective is to survive for a single year, by ruling wisely over the land of your choice and this time you're going to have to do without the *Populous*-style divine powers.

The game screen takes the form of a 3D map with a panel of icons running across the top. It's your job to shuffle resources between the army, farmers and spies to keep the country running smoothly. Of course, don't forget the home front – plenty of houses need to be built to keep the population happy and trees planted to build boats. Should your nation manage to make it through the year, you are moved on to face a fresh challenge.

The main problem with the game is a slight shortage of interaction – it feels very linear and as a result lacks the atmosphere of *Guerroyer*.

ST REVIEW COMMENT: "If you're a fan of the genre, *Conquest* is good for a few games. It lacks the fun element of *Populous*, but the graphics are superbly designed and the sound isn't bad for a STOS game."



Come on, how difficult can it be to rule a country for a year? Find out with a copy of Conquest!



The fractally produced landscapes are very classy, but the gameplay could do with a small injection of action.



Your kingdom covers several screens and the landscape is littered with mini-games to keep action addicts happy.

ARTHUR OF THE BRITONS

LAPD • DISK NO: L.59 • £3.00 • MEMORY: 1MB • LICENCEWARE

IN BRIEF: *Arthur of the Britons* takes a much more relaxed approach to RPG than its stable mates. There's no novella to read, it's simple to play and your mission is clear – conquer the world!



The archery sequence forms a major part of Arthur – be careful to take the wind direction and range into account.

The game is set on a 3D landscape and your army – indicated by a wobbly blue flag – is controlled with the mouse. The idea is to build up resources by playing the mini arcade games that are scattered liberally about the place – no, we're talking archery and mining here, not space invaders! When the troops look ready, it's a dash to an enemy castle and battle follows. The battle sequences are quite hectic, so prepare for a good thrashing in the first few games.

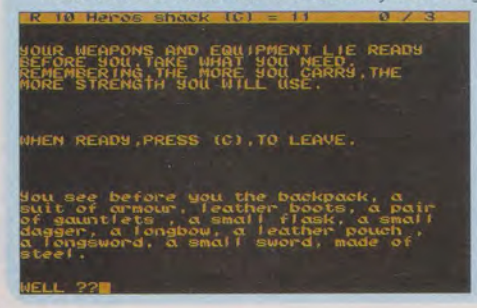
ST REVIEW COMMENT: "*Arthur* is ideal for younger players. It's not too complex – although a few pages of documentation certainly wouldn't go amiss – and the action sequences keep things well up to pace."

TRODONIANS

TUMBLEVANE PDL • DISK NO: GM.110 • £1.50 • MEMORY: 0.5MB • SHAREWARE

IN BRIEF: OK, get ready for a hefty plot. The Trodonians have lost their planet to a power known only as the "Elders". Nobody knows from whence (as we say in RPG land) they came or their purpose, but one thing's for sure – they're spoiling for a rumble! Your quest is clear – rid Thruxton of the oppressors...

Trodonians has tried hard to break away from a rigid text-based shell and instead you play the game by multiple choice. This isn't as limiting as it sounds because you can still talk to all of the characters plus, of course, you don't have to try twelve different sentences before hitting the right combination to open a door. Quite a lot of your time is spent battling with the baddies and each successful attack nets a number of experience points, which will help you in future encounters.



Trodonians succeeds in breaking out of the traditional text adventure mould through the use of a multiple choice interface.



I didn't think you'd appreciate another grab of a screen full of text, so here's a piccy of the title screen – nice innit?

The text is pretty good in terms of atmosphere, although the author has a very annoying habit (nay, mission in life) of leaving out the space after punctuation.

ST REVIEW COMMENT: "*Trodonians* isn't bad as shareware adventures go, although a few piccies certainly wouldn't go amiss. Once you get into it, the plot is quite strong."

WE'RE STILL CRAZY, so crazy that we've extended the offer below for yet another month

And just to prove it we've got some crazy Christmas giveaways and prizes. A totally frivolous gift with every order between £5 and £10. Orders over £10 automatically enter you in our Xmas draw. Prizes to be won include commercial software, joysticks, sundries etc. with a main prize of PC-Speed Hardware, PC Emulator or the new Scanning tray with Merge-it software. Winners will be announced on these pages in February/March cover issues

BUSINESS

BUS-02 ST Writer Elite (Good Word Pro)
This is still one of the very best WP's around written and released into the Public Domain by ATARI themselves. This vers.4 is a must

BUS-03 EZ Text+ (Working DTP demo)
Working demo of excellent DTP program (Full Version Available) see ad for ZZ Soft

BUS-06 Opus (Professional Spreadsheet)
Best S'sheet available without a mortgage!

BUS-11 Deskjet Drivers (loadsadrivers)
If you've got a Deskjet Printer and are in need of drivers, specific or general then this is the disk you're looking for

BUS-12 Fastbase (Excellent First Database)

BUS-16 Calamus Fonts (28 extra fonts)

BUS-17 Printing Press (Cards, Disk labels, Posters, Banners, Mailing Labels and much more)

BUS-19 P. Press Support (Extra graphics)
Make the most of your nine pin printer with the help of BUS-17 & 19, print Greetings & Business cards, Flyers, Posters, all types of labels and much, much more

BUS-21 Add. book/Card ST/D'base +5 others

BUS-26 Organiser/S'sheet/Word pro +7 others

BUS-27 ALICE... Excellent Text Editor

BUS-28 Publishing Partner Fonts (8 + editor)

BUS-29 EZ-Label/Cardfile/Mailmerge + 8 more
Three excellent main programs: Labeller, Card File & a Mail Merge prog + Calendar Mouse Accelerator, Disk Labeller and 5 other indispensable utilities

zz Soft

Quality, Professional Software at a Budget Price

Easy Text Prof. Vector

Now with text at any point size and text can be rotated at any angle. Requirements: Speedo GDOS, Double sided drive, Hard Drive, 2 Meg RAM

RRP £39.95 OUR PRICE **£37.95**

IMPRINT

View, Convert & Process images, Print to most 9 pin or 24 pin, Mono or Colour printers
Comes complete with picture grabbing utility!

RRP £15.99 OUR PRICE **£14.99**

E-Z TEXT +

The perfect introduction to Desktop Publishing
A good starting point for beginners, giving professional results. requires Mono for 300 D.P.I.

RRP £19.99 OUR PRICE **£18.99**

Introducing

ATARI ST Machine Code

Learn to program in Assembler:- This excellent package, comprising of a well written and very extensive book & disk crammed with source code from the book and other utilities, is suitable for a beginner, novice or intermediate programmer

RRP £19.99 OUR PRICE **£18.99**

☆ E-Z TEXT PROFESSIONAL ☆

A full features, high quality, award winning – (ST USER's Blue Chip Award), DTP program. Compatible with 99% of printers inc. Lazer and Inkjet. Uses GDOS & standard GDOS fonts. Requires a minimum of 1 Mbyte of memory

RRP £39.99 OUR PRICE **£36.99**

fully inclusive of post and packing

STE ONLY

STE-05 Mental Hangover, Amiga Conv, 1 meg
This is another one of those Amiga demos converted over to the ST and it does the job so much better!!

STE-06 STE Presentations (5 demo's)

STE-07 Fantasia (not Tos 1.62/1 meg) +3 more

STE-08 Boing STE + Mini-Movie

STE-09 Slime Balls + An Cool Demo's

STE-10 The Tobias Richter Art Show
This famous AMIGA artist comes to your ST with a fabulous STEREO soundtrack (mono on STFM's) (2 DISK SET £2.75)

FREE

10 capacity clear Library Case
with order of 10 normal price PD disks
OR
only **£1** with **any** order

GENERAL

GEN-02 ST-Tour (Specially for beginners)

GEN-04 Your 2nd ST Manual (A MUST)
All the little things (and some not so little) that our friends at ATARI should have told you but didn't. This is the manual that should have been supplied with your computer (at least in our humble opinion).

GEN-05 Adventure Writer/Skymap + 4 more

GEN-06 Archive Suite (back-up in less space)

GEN-09 ZX-81 Emulator + lots of programs
Back to those halcyon days of the ZX-81
Emulate (if you must) this forgotten unit

GEN-12 Formfinder 2.1 (find a winner?)
If you like a flutter on the horses then maybe this program can help to make it profitable!
This is a Working Demo. Full version available

GEN-16 60 assorted samples (SPL Format)

GEN-20 Firstbase DB+7 more good programs

GEN-22 E-Plan (Electronic Circuit Designer)

GEN-24 Joke Database (Laugh with us!)

GEN-25 Quartet Samples II (730k of samples)

GEN-30 Film File Enquiry
With this unusual Database you can keep track of all your favourite Films, Actors, Directors etc. Lots fo classic films inc

GEN-31 Data File (TV Titler/Asst. Chef/Paarty)
Great value on this one: A Video Titler and extensive Recipe/Instruction Database + a bevy of alchafrolic cocktails!!

GEN-34 Sozobob 'C' (language)

GEN-35 Spectrum Emulator (with programs)
Introduce your ST to that long, long ago entity, the ZX SPECTRUM complete with working progs

JANUARY SALE

All disks ordered in the month of January only £1.25 each. Can you afford to miss this offer?

DEMO'S

DEM-102 Doctor Who Demo

DEM-88 Light Speed Demo

DEM-90 Delirious Demo (2 DISK SET £2.75)

DEM-95 Wings of Death Music Demo

DEM-97 KLF Demo (House hit + dancers)

DEM-98 Star Wars Rap

DEM-101 Spinning Dolls + Shiny Bubbles
This one takes a while to load but the end result is more than worth the wait

DEM-84 Things Not to Do (EXCELLENT)
Very Humorous, animated account of things not to do and the result if you do!

DEM-67 Fish & Chips (GET THIS ONE)
Loads of excellent demos with some very funny interludes between them

DEM-46 European Demo's (2 DISK SET £2.75)

DEM-44 Skid Row (2 DISK SET £2.75)

DEM-43 Punish Your Machine(2 DISK SET £2.75)
Countless demos on all of the above two disk sets. Can any ONE user really handle all these amazing demos and stay sane?

DEM-75 Dark Side of the Spoon

DEM-82 Wasted Years

DEM-70 Lifes a Bitch

DEM-54 Gateway to Hexland

DEM-48 Summoning the Spawn

DEM-100 The Run (animation from T. Richter)
This one is so much better than the original AMIGA version

DEM-55 Art Machine
Sit back and enjoy this stunning artwork

ART & GRAPHICS

GRA-26 Crackart
No.1 in STR's PD Top Ten! This prog will process your pics in ways you will not believe: Curve, Twist, Wave, Tube, Palette edit, Dither, Animation and far more. Uses Degas, Neo & Tny format

GRA-24 Paintlux (full feature paint/art prog)

GRA-20 Kozmic (needs 1 Meg)
Create fantastic, colourful psychedelic patterns on your ST & save to disk

GRA-17 PAD (Mono Art program)
Absolutely the best Mono art package we've seen to date, many commercial features and the ability to hold many screens in memory (1 Meg min)

GRA-27 Mono Pictures (43 high-res pics)

GRA-10 Colourburst II (+ 5 other programs)
A very good little Art/Paint prog also on the disk: MAC to Degas converter Fine Line: art prog using Bezier/Spline

GRA-11 A.I.M. (Atari Image Processor
Exactly what it says, if you can create an image on your Atari then you can process, add or alter it with A.I.M.

GRA-14 Ani-ST
Excellent Art & Animation package that started life as a commercial art program costing £89.95!!

GRA-31 Kid Publisher & Master Doodle
A DTP package + Art/Paint program both good starting points for the kids

GRA-32 Colourspace
This is another program that started life as a commercial package now released as Shareware by Jeff Minter. Create your own colour & light show. Turn up the music, sit back and be amazed

GRA-33 Sprite Works
Art Prog geared towards creation of Sprites for use in your own programs

GRA-28 Hi-res Art
4 programs & pictures for Mono users

GRA-1 Picswitch 7.0 (needs 1 Meg!)
Converts your pics between various formats and all screen resolutions

GRA-2 Play - IT
Combine picture and sound into a story board with special scripting commands

☆ C-FONT

Converts Calamus fonts into Bitmap fonts for use with any GDOS package

OUR PRICE **£8.99**

TOS 2.06 Upgrade

This software switchable board comes complete with TOS 2.06 rams to enable you to switch between your original TOS and the much improved 2.6 version. Comes complete with Icon Editor and utilities.

OUR PRICE **£62.95**

TRACKERS & MODULES

TRAX-27 Empire Noise Tracker 1.5
+ 3 modules & utilities

TRAX-44 Digi-Composer (STE Tracker)
with 4 modules

TRAX-47 Mega Tracker (4 n/trackers)
Suit ST or STE + 6 modules

TRAX-48 STOS Tracker (for STOS users)

TRAX-37 MUG AMIG 3
5 outstanding Amiga converted mods

TRAX-45 Rave On (10 mods in Rave style)

INKMUN

INKJET SUPPLIES

Deskjet or Bubblejet
TWIN REFILL PACK
Black refills **£12.99**
Colour refills (Cyan, Magenta, Yellow, Burgundy, Brown, Dark Blue, Gold, Dark Red) **£13.99**

BJ Full Colour Kit
inc. 4 inks B, C, M & Y and cleaning solution + Atari Colour Separation software **£33.99**

BJ/DJ Budget Colour Kit
C, M & Y inks and cleaning solution + Colour Separation s/w **£25.99**

Colour Separation S/W
Deskjet or Bubblejet **£4.99**

Premier
Black and Colour for both HP & BJ Printers
Single refills **£6.99**
Twin refills **£11.99**

Ink King
Black, Cyan, Magenta or Yellow
£7.99 per twin refill pack

MIDI

MIDI-20 SYS-EX Kit (2 DISK SET £2.75)
System Exclusive Kit... if your keyboard supports (YAMAHA) Sys-Ex then this set is for you, two disks chock full of MIDI & SYSTEM EXCLUSIVE progs, utilities, accessories & tips

MIDI-19 Alchemie Jnr (good sequencer)

MIDI-17 Recording Studio Utilities
Keep track of your tracks with these exceptionally good Studio Utilities

MIDI-12 Henry Cosh Sequencer

MIDI-14 Name That Tune (111 midi files)

MIDI-01 PSS special (just for PSS k'boards)
If you own of YAMAHA's PSS series keyboards YOU NEED THIS DISK.....

MIDI-05 Create an album from 43 SNG files

MIDI-04 42 SNG files with CZ101 player

MIDI-05 to 08 Each disk has 40 SNG files

MIDI-10 CZ & DX editors & librarians

MIDI-11 Picture show with 10 midi songs

MIDI-14 Name That Tune + 111 midi files

MIDI-16 Sound Shifter... Yamaha PSS editor

MIDI-18 DX & FB01 editor & librarian

MIDI-21 Feeling Partner & EZ Track demo's
Working Demos of these two great commercial MIDI packages

MIDI-22 Super Conductor sequencer + utils

MIDI-09 32 Track Sequencer + utils

AUTHORS

of PD., Shareware & Licenceware

Here at Warpzone PDL we're always looking for new and innovative titles for inclusion in our library, if you have written something you feel is of good standard then please call us, we will be happy to hear from you

COMMS

COM-02 Galactic Empire... Get on-line game...
You'll need two ST's & null modem cable

COM-03 Vanterm 4.0 (best PD comms prog)
Still the best PD TERM program!!

COM-04 Uniterm (Excellent terminal prog)

COM-07 Freeze Dried Terminal

COM-08 View D/L files when off-line + 4

COM-05 D-Term with Z-modem module

COM-06 Mo-Term Elite (for buffs)

WARPZONE PDL

53 Ropewalk, River St.
St. Judes, Bristol BS2 9EG
Telephone/Fax: 0272 553758

WE WISH ALL OUR CUSTO

WARPZONE PDL

53 Ropewalk, River St.
St. Judes, Bristol BS2 9EG
Telephone/Fax: 0272 553758

GAMES

GAM-79 VIOLENCE (brill shoot-em-up) No. 4 in December's STR PD Game TOP 10
GAM-98 Bubbles McGee/Viking + 6 more
GAM-07 Clowns & Missile (8-bit clones)
GAM-22 AstroDodge/Subhunt + 10 more
GAM-28 Question of Snooker/Frogger + 1
GAM-34 X-word/Bugs/Warrior + 2 more
GAM-36 Klaxtrix/Entombed/Mr Dice + 2
GAM-38 Caves of Rigel/Froggy/Harris
GAM-45 Die Alien Blob (very addictive)
GAM-51 Battleships (with speech) + 2 more
GAM-59 Dungeonz/Gravity/Maze + 3 more
GAM-60 Armour/Haunted/Quizical + 3
GAM-62 Bermuda Races/Geoquiz + 2 more
GAM-67 Battle for the Throne/Video Vegas
GAM-68 to 70 Adventure Solutions... Solutions to well over 100 adventures on 3 disks for £3.00
GAM-73 Lazerchess/Time Bandit + 7 more
GAM-74 Chess Nut + over 90 game cheats
GAM-76 Midimaze 2 + 2 more
GAM-83 S.T.A.C. Adventure Writer Demo
GAM-84 Tetris/Drachen + 4 (MONO games)
GAM-85 Mutant Camel/Llamatron (1 meg)
GAM-88 Odeuss & Sir Ramie Hobbs (adv)
GAM-93 Mars Maze
GAM-95 Lazerbas II/Lazer Racer + 3 more
GAM-23 Go-Up/Nova/Target
GAM-30 Mix & Match + Plumb Crazy

GO FOR GOLD!!!

Join WARPZONE GOLD CLUB now! and get FREE s/ware each quarter + 20% off D/S disks, 10% off S/S disks, 10% off RRP of commercial software/hardware, Free Disk & other gifts on joining.

All this for only **£10.00** per annum

GAM-101 Droid, Inseco & Miss Munchie All arcade clones
GAM-102 Fokker, Megapede & Match-up 3 commercial quality games
GAM-95 Bomb Jack, Mad Mole, Lazer Racer + 2
GAM-84 MONO 3 Tetris, Poker, Push, DRACHEN, Cipher & Daleks all for Mono Monitors

SUNDRIES

SCOOP BULK PURCHASE

High quality lifetime guarantee
DS/DD Blank Disks
100 – £ 30.00
250 – £ 72.50
500 – £135.00
Post and Packaging on all disk purchases: £3.50 parcel post. £7.50 courier

DISK STORAGE BOXES

50 Capacity £6.95
100 Capacity £8.49

☆ PRINTING PRESS ☆

Print Labels, Cards, Flyers etc.
PRINTING PRESS SUPPORT
Extra artwork, icons & borders
Both Programs only £2.50

CLIP ART

CLIP-1 Clip Art Vol. 1 Cartoons, Cars, Animals, Astrology, Computer, Disney, Flags & much more
CLIP-6 Clip Art Vol. 6 Borders, Frames, Titles & decorations
CLIP-7 Clip Art Vol. 7 (Viz & Garfield)
CLIP-8 Clip Art Vol. 8 Geriatrics Guide to Sex, very funny extract from book in clip art format
CLIP-2 Clip Art Vol. 2 (Scrolls & Banners)



Print 'n' Wear

Textile Transfer Papers

Design your masterpiece, using any art package on any computer then print out your design with any:-
For Dot Matrix Printers either in Mono or Colour and iron on to any fabric!! all thats left to do is to wear your very own creation!

Now only £7.99 per pack

MIXED BAG

MXB-20 Fcopy 3/Disktool + 10 others inc, File Packer, File Reader, Qwikmouse, Desktop Music, 2 Demos, Battlezone Game, Nasa Game, Desktop Cala & more
MXB-14 Geography/Typewriter + 10 more
MXB-12 Grammar check/Loan calc + 10
MXB-10 Diskmech/ST Init + 11 others
MXB-21 Quark... 30 Sci-Fi stories on disk
MXB-18 Professional Astrology A truly professional Astrology prog with serious support and upgrade - add on modules, available from its very helpful author
MXB-16 15 asst'd utils inc. Goodies/Fontrix
MXB-04 12 asst'd utils inc. Codefind/Arc Inc. Archive prog. Assembler to GFA STD code finder, Format prog. HD-Utility, Data Salvage & more
MXB-25 Miscellaneous STOS upgrade (to any ST), Dual-Column printer, Fastprint utility, Spell Checker & Artprint – a way to keep graphic track of your piccy's and Clip Art

UTILITIES

UTIL-40 Minidraft 2 (+ST CAD + 1 more)
UTIL-34 Mega Utility (31 asst'd utilities)
UTIL-06 HD utils/Ramdisk and 12 others
UTIL-20 Archive Suite (compression progs)
UTIL-21 Sticker III (best disk labeller)
UTIL-22 10 progs for printer owners
UTIL-05 7 suites of various label progs
UTIL-30 Address book/V kill/Packer + 12

UTILITIES

UTIL-32 MINT (unix type system)
UTIL-33 Superboot 7.2 + 7 others
UTIL-04 Disk cataloger & Labeller + 1 more
UTIL-06 Formatter/Ramdisk + 12 more
UTIL-10 Gemini, alternative, Desktop
UTIL-11 18 asst'd desk accessories
UTIL-16 17 asst'd desk accessories
UTIL-24 Disk Doubler/Dual Format +12
UTIL-27 Sagrotan (Virus killer, very good)
UTIL-38 Vault (best HD back-up) + 5 more
UTIL-02 System 2 (replacement op. sys)
UTIL-39 Various Archivers & Packers
UTIL-40 ST CAD II (excellent CAD prog)
UTIL-41 Spreadsheet/Sector edit + 4 more

PRICES

£1.50 per D/S disk
Intro disk catalogue including 700k software £1.00 + S.S.A.E.
All orders over £5.00 add 50p p&p unless otherwise stated (U.K. only). All overseas orders in Sterling. Overseas postage rates on request.

Catalogue Only:-
Please send Blank Disk & S.A.E.

Only one Free Offer per order please
Cheques/P.O.'s to Warpzone PDL

MUSIC

MUS-31 Megarave (extra long Rave track)
MUS-29 Energy for You (5 Dance tracks)
MUS-28 Hardcore Dancefloor (NOT STE)
MUS-21 Hi-Fidelity Dreams As reviewed in March STR, you have just got to hear this! Better on an 'E', Amiga eat your heart out!!!
MUS-22 to 27 Peeks & Pokes 1 to 6 All these tracks are of the same quality as Hi-Fidelity Dreams (MUS-21)
MUS-30 Musical Wonder Demo 88 pieces of music some original some Digital tracks & some Sound Chip tunes

P.D. STARTER PACK

10 Double Sided Disks of Your Choice in a clear plastic library case. An offer that is definitely not to be missed!

£11.99

Fully inclusive of post & packing
★ excludes all free offers ★

EDUCATION

EDU-4 Body Shop, Kid publisher/Story
EDU-5 Spelling Easy + Alphabet
EDU-21 Master Time (Analogue & Digital)
EDU-24 Playtime (6 activities for very young)
EDU-20 Stargazer (astronomy - 2 programs)
EDU-19 Rip It Up (learn Highway Code-Demo)
We also carry the full range of: SHOESTRING Educational Software

MEGA Pack

21 packed to capacity dd disks over 14.5Mb of software. A cross section of our library – all this for only **£22.99** inc p&p.

DEMO Pack

A feast for your eyes and ears with over 60 Demos, many doing just what the ATARI is not supposed to be able to do!!! **£8.99**

SOUND Pack

Music just for the pure pleasure of it. That's what this pack is all about, you will be surprised how good your ST sounds. 40 tracks to feed your ears. **£8.99**

EXTRA VALUE PACKS

The equivalent of 7 Double Sided Disks full of programs
now only **£7.99** per pack

MIDI Pack

If MIDI is your thing, then this pack is for you... Over 60 files inc. Sequencers, MIDI Utilities, MIDI format seq files, Librarians, Patch editors & more.

GAMES Pack

47 widely varied games, from the really easy to the frustratingly hard, you're sure to find something to test your mettle in this collection.

EDUCATION Pack

From pre-school (shape/colour recognition) right through to late teens (Highway Code) you will find the learning aids in this collection many and varied.

MUSIC Pack

This pack will have you and your ST making music in no time. Sequencers, Noise Trackers and Modules Musical Trivia + songs just for listening to.

ART Pack

If you have always wanted to create a masterpiece and all that was lacking was the tools then look no further... Art progs and pics galore in this pack!!!!

ADVENTURE Pack

Lose yourself in the realm of myth, magic and mystery with the many and varied text & graphic adventures in this pack.

BUSINESS Pack

Need a Spreadsheet? or a Database? or maybe a Word Processor? In this pack you will find all three and much more.

UTILITY Pack

Here are no less than 50 utilities for countless weird and wonderful uses. Best used with your ATARI ST/E.

CLIP ART Pack

This Pack is so new that the files are not even in the main library yet!!!!! As usual 7 full D/S disks

TAKE any TWO packs

For Only
£13.99
★ Twinpack offer excludes library cases ★

THIS MONTHS SPECIAL OFFERS

Mouse Mat & Mouse Holder Xmas Pack ..£2.99
Monitor Arm Copy Holders £2.49
New Year Grab Bag includes 50 quality blank disks, joystick, mouse house, mouse mat, copy holder, drive head cleaner plus surprise item .....£22.99 + £3.50 p&p

FREE OFFER

Placing a software order for more than £7.50 will entitle you to a choice of one or more of the disks in the box on the far right **FREE!**

More than **£9.00**: choose any **1 disk**
More than **£18.00**: choose any **2 disks**
More than **£28.00**: choose any **3 disks**
More than **£40.00**: take all **four disks!**

1) **OPERATION GARFIELD** – Excellent new STE game
2) **MIDI MUSIC MAKER** – Play most types of Midi/Music files
3) **ART TUTOR** – Let your ST be your Art Teacher
4) **EASY PLAYER** – Play MOD files by just clicking on them

MERS A HAPPY NEW YEAR

PD ZONE

BEFORE DAWN

ATARI ST REVIEW BUDGET BUY

GOODMAN INTERNATIONAL • DISK NO: GD.212 • £2.75 • MEMORY: 0.5MB • SHAREWARE • FALCON ENHANCED

IN BRIEF: For years Macintosh users have enjoyed the thrills of wacky screen savers and *Before Dawn* attempts to bring a similar level of sophistication to the ST, TT and Falcon.

Several effects are included with the package: "Warp 5 – Mr. Sulu!" shows a zooming starfield, "Bouncing Hole" displays a floating see-through IMG to the running application and "At the Movies" sees an animation of your choice popping up after a set period of inactivity. All of the effects are completely customisable and an editor is included to help you put together your own animations. Mind you, it's hardly worth the effort – the supplied demos are truly excellent.



The best way to describe the "bouncing hole" effect is to show you one...

If you fancy a bit of music when the screen fades, *Before Dawn* interfaces with several sound module players, including *Paula*. It works in all resolutions, from mono to true colour and is compatible with most well written applications.



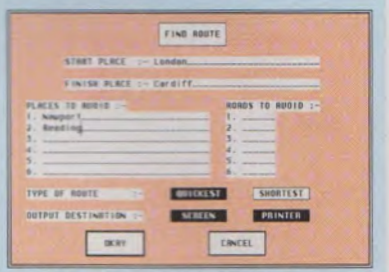
The saver module can be adjusted on-the-fly to suit your mood.

ST REVIEW COMMENT: "If you're looking for a classy screen saver, *Before Dawn* is the very best you can buy. It's found a permanent home on my system and one or two incompatibilities are the only blemishes in a near perfect picture."
★★★★★

ROUTE FINDER

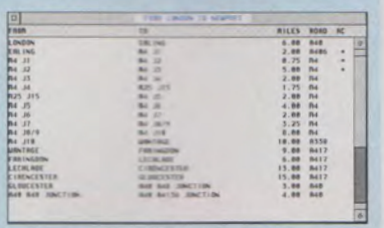
LAPD • DISK NO: M.155 • £1.50 • MEMORY: 0.5MB • PUBLIC DOMAIN • FALCON-COMPATIBLE

IN BRIEF: How many times have you map-planned a route from A to B only to discover that the lovely looking B245 is in fact a cattle track, barely wide enough to accommodate a child's push bike? Nextbase came up with the ideal solution in the form of *Autoroute*, but if you're on a tight budget *Route Finder* makes a reasonably good alternative.



A starting point, destination and Route Master. Look on it this way – at least you'll have something to blame when you get lost!

The program favours the text approach over graphical maps and the result from entering two towns is a list of directions which can be sent to the screen or printer. You can enter places to avoid on the journey and choose between the quickest or shortest route. One niggle is the format of the directions – for example instead of saying "join the M4 at junction 5 and leave at junction 10", it lists every single junction you need to pass as a separate direction. The supplied database is quite comprehensive and it's very easy to add new towns.



The resulting directions sometimes defy logic, but Route Master remains a valuable tool for basic travel planning.

ST REVIEW COMMENT: "*Route Finder* isn't going to give *Autoroute* any sleepless nights, but providing you add a dose of common sense to its directions, it's a very useful tool."
★★★★

REVENGE DOCUMENT DISPLAYER 3

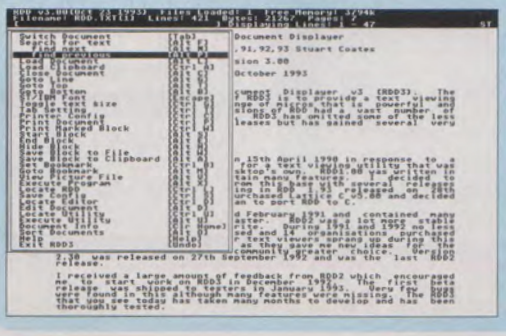
ATARI ST REVIEW BUDGET BUY

NEW AGE PDL • DISK NO: UTIL.57 • £1.50 • MEMORY: 0.5MB • SHAREWARE

IN BRIEF: Let's face it – the GEM desktop is a joke when it comes to text display. The only way to move through a file is forwards and as for search facilities – well, you can forget it.

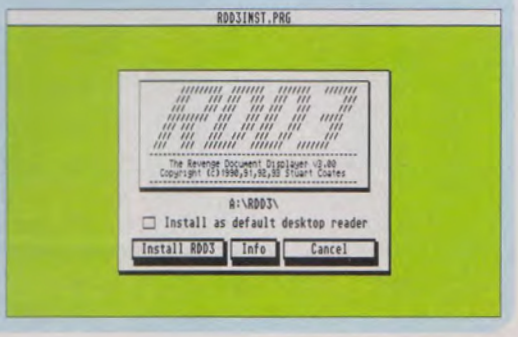
Revenge 3 provides an answer. It's undoubtedly the fastest display program available for the ST and comes ready set up to hook into your *DESKTOP.INF* file. The new version offers multiple file support, comprehensive searching, flexible book-marks and lots more besides. The scrolling is wonderfully fluid and controlled entirely with the mouse.

Traditionally, *Revenge* was a bit of a pain to use, but this aspect has been improved too. A familiar GEM file selector now sits in the place of the clumsy custom alternative used by earlier incarnations and on-line help is available at all times.



On a high resolution monitor the number of lines can be doubled to give a better overall view of the page.

ST REVIEW COMMENT: "If you're looking for a quick way to display ASCII text files, *Revenge* is the bee's knees. Version 3 isn't as revolutionary as it might have been, but it's still well clear of the crowd."
★★★★



The installer is capable of patching the DESKTOP.INF file to make Revenge 3 the default text viewer.

THE BOOK OF TESTS

EMERALD CITY • DISK NO: SN.42 • £2.50 • MEMORY: 0.5MB • PUBLIC DOMAIN

IN BRIEF: *The Book of Tests* is an entertaining experience in self-analysis. It will give a measure of your executive potential, assess thinking style and provide an indication of your job interests based on responses to a set of questions and statements. For example, the executive test takes you through 76 proverbs and asks whether you agree or disagree with the principles involved.

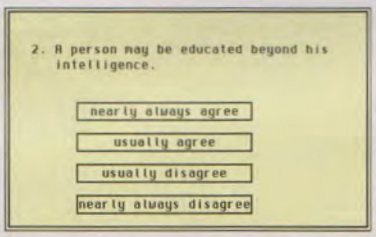
The interface is mouse controlled and working through the test is just a case of clicking on a sequence of buttons. Each section kicks off with an explanation of what the test entails and all contain over 70 questions, so prepare to spend some time learning about yourself – remember, no pain, no gain!

ST REVIEW COMMENT: "It's very limited in its appeal, but *The Book of Tests* is great fun all the same – surely a negative executive potential rating must be some kind of new record! If you're looking for a neat way to while away an evening, give this one a go."

✪✪✪



Fancy yourself as executive material? Let the Book of Tests decide your future.

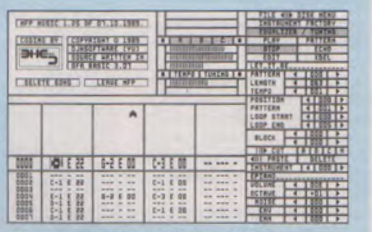


By assessing your responses to proverbs, the Book of Tests claims to be able to measure your executive potential.

MFP MUSIC

GOODMAN INTERNATIONAL • DISK NO: GD.2125 • £2.75 • MEMORY: 0.5MB • PUBLIC DOMAIN • HI-RES ONLY

IN BRIEF: Sampled sound modules are wonderful, but the truth is that they take up an awful lot of your computer's precious processing power. A far better idea from a programmer's point of view is to use the ST's own internal sound chip, and that's exactly what *MFP Music* allows you to do, in true style...



If you are familiar with any soundtracker program you'll pick up MFP Music in no time.

The layout of the program is very similar to most soundtrackers. Towards the bottom of the screen you will find four columns of notes, each representing a different sound channel and on the right are the music controls themselves. It's all extremely easy to use, although including tunes in your own programs will probably require a bit of experimentation thanks to the lack of English documentation. A desk accessory playback program is included for those who'd rather compose than compile...

ST REVIEW COMMENT: "You'll be very pleasantly surprised at the quality of the tunes churned out by *MFP Music*. Sure, it's no match for *Noisetracker*, but if you're working with *GFA Basic* it's got to be worth a try. The instrument factory and tuning studio are particularly nice."

✪✪✪✪



Finished symphonies can be installed and played along in the background while you work.

TOP TEN UTILITIES

1 REVENGE DOCUMENT DISPLAYER 3 • NEW AGE PDL • DISK NO: UTIL.57 • £1.50 • MEMORY: 0.5MB • SHAREWARE

You want fast text display? – You got it! Revenge is the undisputed champion of file viewers and version three brings multiple document support, a tweaked interface and a host of other extras. Like its predecessor it's loaded with powerful search facilities and even has the ability to decrunch Ice Packed text files.

2 BEFORE DAWN • GOODMAN INTERNATIONAL • DISK NO: GD.212 • £2.75 • MEMORY: 0.5MB • SHAREWARE • FALCON ENHANCED

Forget dull screen savers – Before Dawn provides customised starfields, flying disks and plenty more besides! All operations are coordinated through a beautiful non-modal GEM desk accessory and it works in every screen resolution on the ST and Falcon.

3 TDK DIALLER • GOODMAN INTERNATIONAL • DISK NO: GD.2126 • £2.75 • MEMORY: 0.5MB • POSTCARDWARE • FALCON-COMPATIBLE

TDK Dialler is one of those utilities that only the public domain can produce. The main part of the program is a telephone database much like any other, but the twist is it will dial the number for you – just pop your phone next to the speaker and click the button!

4 RDE 3 • FLOPPYSHOP • DISK NO: UTL.3834 • £2.50 • MEMORY: 1MB • PUBLIC DOMAIN

RDE started life as a companion utility to *Mark Williams' C* and has steadily grown into the best reset-survivable ramdisk on the market. It can be used as a boot drive and the contents can be saved as a single file and reloaded at a later date. Despite the claims of improved compatibility in the documentation it doesn't seem to like the Falcon at all...

5 ROUTE FINDER • LAPD • DISK NO: M.155 • £1.50 • MEMORY: 0.5MB • PUBLIC DOMAIN • FALCON-COMPATIBLE

Route Finder will search out the quickest or shortest route between two towns. Its database covers the whole UK and new towns are easily added. To be honest, it's not going to put a huge dent in the AA's profits, but is very handy for working out a basic route.

6 THE FILING CABINET • LAPD • DISK NO: L.63 • £3.50 • MEMORY: 1MB • LICENCEWARE • FALCON-COMPATIBLE

For a no frills database look no further. *The Filing Cabinet* offers all of the record-crunching basics from within a simple shell. It's not wildly powerful but the bold, clear interface could make it an ideal package for kids.

7 MARROW • FLOPPYSHOP • DISK NO: UTL.3884 • £2.50 • MEMORY: 0.5MB • SHAREWARE

Sick of using the cursors to scroll up and down a word processed document? Why not install *Marrow* and use the mouse instead? The effect is switched on by pressing <Alt>, <Shift> and <Help> and is disabled with the same combination – easy eh?

8 MFP MUSIC • GOODMAN INTERNATIONAL • DISK NO: GD.2125 • £2.75 • MEMORY: 0.5MB • PUBLIC DOMAIN • HI-RES ONLY

MFP Music will extract the very best from your ST's humble Yamaha sound chip. It adopts the same layout as most modern soundtrackers and is equally easy to use. A dozen or so pieces of music are included on the disk.

9 MULTITOS UTILITIES • NEW AGE PDL • DISK NO: FALC.15 • £2.00 • MEMORY: 1MB • PUBLIC DOMAIN • HD DISK DRIVE REQUIRED • FALCON-COMPATIBLE

This disk contains no less than 45 *MultiTOS* utilities. There are programs to create directories, unarc files, hog processor time, adjust priorities and lots more. They're not the sort of thing the casual user would find useful, being command line driven, but could be useful for programmers and techies.

10 MENU HACKER • LAPD • DISK NO: U.62 • £1.50 • MEMORY: 0.5MB • SHAREWARE

Menu Hacker claims to be able to replace the intro screen from most demos with a picture of your choice. The instructions are easy to follow and it's effective on quite a few programs, although do make sure you work on a back-up. Registration weighs in at £6.

New Age PDL

THE BEST FOR ST AND FALCON 030!

THE ATARI FALCON

At New Age PDL we are supporting the new Falcon 030 101%. We currently have a huge stock of Falcon specific and enhanced software all on High Density (1.44 meg) disks. We also fill these disks to capacity wherever possible to give you the best possible value for money. We now have a dedicated Falcon catalogue containing loads of free software including utilities, demos, music and a game. This catalogue is COMPLETELY FREE to new customers with your first order – just ask for it.

ALL FALCON DISKS £1.75 EACH ONE FREE WITH EVERY 4 BOUGHT!

FALCON ART & GRAPHICS PROGRAMS

FALC 1 - POV Raytracer, fully zipped, expands to 3 meg of hard drive space!
FALC 3 - Birdy 2 Animation (4 meg+), very cute! Cyrel Palette Master demo.
FALC 8 - Fractal D[illegible]actal Zoomers, IFF, GIF, RAW & TGA viewers, Bit Camera for altering raster images, Speed of Light 2.6, F-Paint, Chagall demo, Slideshower.
FALC 16 - Lexicor demos (zipped): Chronos 1.2, Pheonix 0.91, Prism Paint 1.0.
FALC 37 - Fractal Playtime, Gemview 2.48, Delmpaint, Gix Gif, Binaris 2.0 + more!
FALC 95 - Geotech - landscape generator, Neochrome, Photo Studio demo + more!
FALC 98 - Chloe demo, Overlay demo 1.03 (zipped), Pixart demo 1.02.
FALC 102 - Raystart demo 1.1, View XGA, IMG converter.

FALCON PICTURES & ANIMATIONS

FALC 12 - Disk 1 of a three disk set of Truecolour 24-bit pictures using the POV raytracer. Outstanding quality! Buy FALC 12-14 for £5.00. RGB/TV.
FALC 18 - Japan Demo - two zipped disks of Truecolour XGA pictures with viewer. Disk 2 on FALC 19. Photographic quality! Requires RGB/TV.
FALC 31 - Temptation! The first disk of an EXCLUSIVE pack of JPEG pictures of gorgeous girls. Excellent quality pictures and the three disk pack contains no less than ninety pictures! Yes 90! Disks 2 & 3 on FALC 32 & 33.
FALC 34 - The Chippendale Auditions. This time a disk of gorgeous blokes!
FALC 38 - FLI Animations: AS Lamp, Balloon, Bart, Glass, Hands, Bounce 2.
FALC 39 - FLI Animations: A3DS, Apple, B Ball, Bugs Bunny, Chubb, Cone, Tigercat
FALC 40 - FLI Animations: AD Logo, Chopper, Dinosaur, Dogbot, Frog, Earth.
FALC 41 - FLI Animations: Bartboard, Betty Boop, Clown, Fish, Marylin, Forever.
FALC 42 - FLI Animations: Dust, F14, Ghostpen, Handmorf, Wave Log0.
FALC 78 - Japanese Cartoon Pictures - the first of a 4 disk pack of JPEG's from cartoons such as Akira, Dragon Balls etc. Over 140 pictures on all 4 disks!
FALC 85 - Startrek Pictures - JPEG's from all series.
FALC 86 - Startrek Pictures - more JPEG's as above.
FALC 87 - Boat Pictures in JPEG format. 27 pictures in all.
FALC 88 - Dog Pictures in JPEG format. 43 pictures on all varieties of dogs.
FALC 89 - Animal Pictures - the first of five disks of all sorts of mammals. (JPEGS).
FALC 90 - Animal Pictures - more of the above. Even more on FALC 91, 92 & 93.
FALC 99 - Car Pictures in JPEG format - Ferraris, Porsche's, Lambo's, Mercedes etc.
FALC 100 - Car Pictures in JPEG format - more flash cars. A third disk on FALC 101.

FALCON DEMOS

FALC 6 - Cebit '93 (RGB), 1600x600, 3DTT, Paragon, Convention (RGB Superb!).
FALC 9 - Grotesque (Excellent!), Gourad, Speeder, Plasma 30 & 50, Intel + more!
FALC 11 - Morphing demo - requires 2 Meg memory + hard drive space. + 3 more!
FALC 27 - Left Donut by Griff (RGB), EKO (RGB - Outstanding music!), Big Digi.
FALC 96 - When Dreams Become Reality (RGB), Warum (RGB), Inconvex (RGB).
FALC 97 - Fuji Ray animation - zipped requires 2 meg memory + hard drive space.

FALCON MUSIC RELATED PROGRAMS

FALC 7 - FoRtune for creating cites, Protracker 2, TCB Tracker, Desktracker 1.11.
FALC 17 - Winrec 1.35 (D2D), Wincut for editing Winrec samples, Hardchor (D2D).
FALC 29 - Startrek Cites for Fortune, Dame - Digital Audio Multipayering Editor.
FALC 52 - System Audio Manager 1.1 - assign samples to events, Digitape 2 demo.
FALC 68 - 49 Wav samples for System Audio Manager.
FALC 73 - Another 41 Wav samples for System Audio Manager.
FALC 82 - Protracker 50Khz modules: Come & Get me, Pugsy, Tripout, Hardcore etc.
FALC 83 - As above: Freudian Dreams, Goodbye, Harry, Intro, Journal + 5 more.
FALC 84 - As above: Watch Your Bass Spin, Boom And She Cums, Fin + 4 more.
FALC 94 - Mjuzakk - Huge sound player program. Zipped, expands to 2 meg.

FALCON GAMES

FALC 21 - Humans Demo disk 1. Zipped, expands to 3 Meg. Disk 2 on FALC 22.
FALC 35 - Nethack 3.1.1 - 2 Meg memory+. Brilliant dungeons and dragons game.
FALC 103 - Oxyd (excellent!), Des Lasers et Des Hommes (3D shoot em up), Masters of Chaos (Dungeon Master clone), Tron, Ishar Editor, Mario Kart demo.
FALC 104 - Spacola (RGB) - great space shoot em up, Madtris (RGB) - crazy Tetrus!, Vertical Mayhem (RGB) - nice version of Columns.

THE ATARI ST/STE

New Age PDL in now in it's third year of business supplying top quality ST/E software. We now have over 1500 disks of some of the best PD, Shareware and Licenceware to suit all tastes. Just look through our advert ot get an idea of the huge range that we carry. Our disk based catalogue describes every single program in detail, has a beginners section and is very easy to use - it's also COMPLETELY FREE to new customers! Just ask for it, there's no need to send any disks or SAE's. If you are an existing customer and you would like an update then send back your disk with a stamped SAE.

HIGH RESOLUTION GAMES

GAME 1 - Anduril, Eliminator, Galaxy, Gilgalad, Mini Golf, Bubble, Runner, Space War, Tetris, Play Thing, Once 'A King.
GAME 8 - Diamond (Boulderdash), Invaders, Macpan, Megaroids (Asteroids), Minefiled, Missile, Murray, Solitair, Spreng.
GAME 22 - Checkers, Larn, Trucker, Stocks And Bonds 3, S-Tetris.
GAME 28 - Payramid, Escape, Sokoban, Cube World, Battleships.
GAME 30 - Air Traffic Control, Go-Board, Munchers, Pong, Puz Puz, Trivia, Go-Up.
GAME 33 - Bolo (Excellent breakout game), Super Breakout, Baseball.
GAME 34 - Pork 1 & 2 - spoof Zork type adventure games, Enchanted Realms.
GAME 37 - El Bozo's City, Paranoia, System 5, Tark - all text adventures.
GAME 38 - Net Hack v2.3, Scribble, Sherlock, Zarge, Checkers.
GAME 39 - Eamon Fantasy Role PLaying Kit, DDST - dungeons and dragons.
GAME 50 - Jeopardy, Clueso, Airline Manager, Locomotive, Bandwurm, Hextris.
GAME 76 - Hack & Slay Construction Set, Chess, Match-it, Crossword Editor 2.
GAME 112 - Risky Construction Set, Roulette, Yatsy, Backgammon, Poker, Pai Gow.
GAME 125 - Cyote Dave's Poker, Deena, Cribbage, Tectic, Fast Poker.
GAME 167 - Thriller - a nice ball/maze game with nice graphics and samples.
GAME 168 - Napolean - a 'Risk' style game of war and strategy.

COLOUR GAMES

GAME 2 - Startrek game - NOT STE (1 Meg+). Life version 3.
GAME 9 - Othello, Queboid, Spooks (Pacman), Yahtsee, Centaurian (NOT STE).
GAME 11 - A Question of Snooker, Pinball, Devestator, Roll n Nudge, Ranger.
GAME 16 - Ship Combat, MAD, England Team Manager, Motorcycle Simulator, Pulse Rider (tron), Empire Builder, Key to Atlantis.
GAME 68 - Squidge, Fruit Machine, Pin Game, Rocket Ball.
GAME 78 - Popeyed - apop music game with an adult theme.
GAME 81 - Battlescape, Blax - brilliant variation on the Tetris theme.
GAME 83 - Grandad & the Holey Vest - superb animated adventure. 1 Meg+.
GAME 94 - Hocman 2 (1 Meg+), Dungeons, Wheel of Money 3.
GAME 104 - Blat! - A very nice version of Tetris. STE ONLY.
GAME 105 - Infiltration - 3D game, Ozone, Atomik Robokid.
GAME 117 - Fast Freddy - lovely platform game with superb graphics.
GAME 121 - Darklyte - great Isometric 3D war/strategy game similar to Hero Quest.
GAME 122 - Last Arcadian - fly around + blast everything. Hoverjet Simulator Meg+.
GAME 123 - Top Trainer (horses), Anarchy Academy - wreak havoc in school. Boring.
GAME 128 - Dungeon Lord - good Dungeon Master Clone. Arch Mage-shoot em up.
GAME 131 - Glass Buttock of Tharg - save the land from the evil buttock! - 1 Meg+.
GAME 132 - Psycho Pig - two disk platform game, very cute. £3.00.
GAME 135 - Grey Matter - difficult brain teaser from DCS, Splat! Picardy, Galactic.
GAME 136 - Chaos 1/2 Meg version - classic spectrum game converted. Lettris.
GAME 138 - Puccer - a bit like Ice Hockey, Rayoid.
GAME 139 - Grandad II - the sequel to Game 83, comes on 2 disks 1 Meg+. £3.00.
GAME 143 - Brain Damage - the biggest, most difficult brain teaser yet form DCS.
GAME 145 - Jiggsy - a cute cross between a jigsaw and sliding puzzle.
GAME 146 - Chaos - the full 1 Meg version of Game 136.
GAME 147 - Freaked Out - nice puzzle game. Shift-it (1 Meg) - another good puzzle.
GAME 148 - Operation Blue Sunrise 3 - massive STAC adventure game. 1 Meg+.
GAME 150 - Course Angler 1.02 - go tackle fishing on your ST!
GAME 151 - Sim Pig! - a brilliant pig farm simulation! Like Sim City & Sim Earth.
GAME 153 - Wormhole - nice vertically scrolling shoot em up with slick graphics.
GAME 154 - Midi Zap - multi-player asteroids. A Highly Suspicious Aquarium.
GAME 155 - Three Realms of Suspicion - STAC adventure. Spaceball - like Ice Hockey.
GAME 157 - B17 - bomb the building, F-16 - very good flight game, 8 missions.
GAME 158 - Viking III - shoot em up/strategy game. Demon - but like Xenon.

THE KEYSOFT COLLECTION

Two disks which are EXCLUSIVE to New Age PDL! Disk one (GAME 159) contains Spielarum 1.2, a 3D game. Plus Kakrivs - the sequel to Spielarum, again in 3D and lastly Mysterious Realm which is an introductory level adventure game. Disk 2 (GAME 160) contains 4 shoot em ups called Starship Troopers, Auto Destruct, The Jack Peters Story & Melanias Revenge. Buy the disks individually at £1.50 each or both for £2.50!

£2.50

GAME 161 - Frooty - fruit machine sim (Not TOS 1.4+), Fallers.
GAME 162 - Baby Mugluck - platforms + ladders, Entombed - more platforms!
GAME 163 - Theme Park Mystery, Combat - kill everything!, Summaria.
GAME 164 - The Obscure Naturalist - STAC adventure with lovely graphics. 1 Meg.
GAME 165 - Quiz Master - quiz that actually has answerable questions! STE only.
GAME 166 - Nirvana - platforms, Pure Logic, Maze, Chain Reaction - columns.
GAME 169 - Megaline - a new four player version on Tron/Light Cycles.

BUDGIE GAMES - £2.75 EACH

BUGAM 83 - Cyberstorm, a very slick Defender game, really fast!
BUGAM 89 - Horse Racing Simulator for 1 to 5 players. Buy/sell and bet!
BUGAM 100 - Clad Hopper - lovely version of Manic Miner from the 8-bit days.
BUGAM 103 - Aptitudes - 7 modules to test your personality and gives a report.
BUGAM 104 - Jetpack - another faithful clone of a classic Speccy game.
BUGAM 111 - International Cricket - a very good cricket simulation.
BUGAM 113 - Football Tactician - formerly a £20 release! Excellent!
BUGAM 119 - Football Tactician - the Premier League 92/93 season.

POWERFIST GAMES - £3.00 EACH

POWER 1 - Snott 93 - previously commercial playable platform game. 1 Meg+.
POWER 2 - Ghalla One - four levels of alien blasting chaos!
POWER 3 - Seven Galaxies - extremely slick shoot em up, one of the best so far.
POWER 4 - Hunchy 1066 - go back in time with some artillery for this classic!
POWER 5 - Deluxe Nastrum - great flip screen arcade adventure. 1 meg+.
POWER 6 - Deluxe Nastrum - the 1/2 meg version.
POWER 8 - Power Cut - fly-around-blast-em-up with 25 power bases to destroy!
POWER 9 - Lord Ramsey in the 25th Century - great cartoon-style caper.
POWER 11 - Snott 93 - the 1/2 meg version. Plus PDOS 1.5.
POWER 13 - Location Universe 3D - escape four taxing levels of this brill 3D game.
POWER 14 - Castle Capers - wonderland platform game set in a haunted castle.
POWER 15 - 'Ees Lost His Marbles! - Huge adventure written in STAC.

CREATIVE INFLUENCE GAMES

CI 01 - Genocide - Populous/Sim City type God Game. Given 'Essential Buy Award' in ST Review magazine. £3.95.
CI 02 - Dark Carpathian - 3D game with good attention to detail. £2.95.
CI 03 - Guerroyer - another God game. ST Review said 'The Best Licenceware game of the year - without a doubt! Unmissable! £2.95.
CI 04 - Shockwave - brilliant version of Asteroids with powerups etc. £2.95.

ART & GRAPHICS

ART 1 - A disk full of 23 miscellaneous utilities including viewgif 1.2.
ART 35-37 - In Bed With Madonna - over 100 pictures. STE enhanced. £4.00.
ART 51 - Crackart 1.36 - latest version of the best ST art package! 1 Meg+.
ART 128 - Gemview 2.48 - new version of this superb viewer/converter.
ART 137 - Basic Instinct - Near Photographic Quality pictures! State STE or STFM.
ART 144-149 - Seduce Volume 2 - the sequel to the highly successful seduce! Six disks of lovely ladies, two versions (please state which) - one for STFM and the other for STE's taking advantage of a 32,768 colour palette! EXCLUSIVE to New Age! Only £7.50. 60Hz (may not run on TV's). Many more packs available - ask for our catalogue.
ART 156 - Madonna's Book - twenty pictures from her famous book. STE only.
ART 157 - PAD 2.4 - English version of this high res drawing package. 1 Meg+.
ART 172 - Paintshop Plus 2.03 - A commercial quality drawing package.
ART 180 - Paintpot - an ex-commercial painting package which was £15.00

DEMOS

DEMO 307 - Deeper and Deeper by Madonna. 1 Meg+.
DEMO 305 - Rain by Madonna. 1 Meg+.
DEMO 303 - Erotica by Madonna. 1 Meg+.
DEMO 300 - U Got 2 Let The Music by Cappella (excellent!) - 1 Meg+.
DEMO 295 - Boom! Shake The Room by Jazzy Jeff & Fresh Prince. 1 Meg+.
DEMO 293 - Life, Mission Control Mix by Haddaway. 1 Meg+.
DEMO 292 - What is Love Passion Mix by Haddaway. 1 Meg+.
DEMO 289 - Wheel of Fortune Club Mix by Ace of Base (Brill!) - 1 Meg+.
DEMO 288 - Trance Action 5 - I Feel It, Smythe Mix by Moby - 1 Meg+.
DEMO 287 - Trance Action 4 - U Got 2 Know by Cappella - 1 Meg+.
DEMO 284 - Trance Action 1 - No Limit, Automatic Fast/Slow mix. 1 Meg+.
DEMO 283 - Mr Vain by Culture Beat - the smash hit Euro single - 1 Meg+.
DEMO 281/282 - The PETE demo - great megademo by many good groups. £3.00.
DEMO 277/278 - Believe The Music by Redlite. STE and 1 Meg only. £3.00.
DEMO 276 - E605 - a great STE only demo by Percy of Light.
DEMO 274/275 - Dreamzone - the latest megademo from the Wild Boys. £3.00.
DEMO 273 - Right Here by Sisters With Voices - 1 Meg+.
DEMO 270-272 - The Omikron Megademo - takes up 3 disks! 1 Meg+ - £4.00.
DEMO 264 - Romeo, Petit Papa Noel, Sinful Sinuses - 3 STE only demos.
DEMO 260 - Waiting For The Falcon demo.
DEMO 258 - Brutal Techno - Fantastic STE and 1 Meg only demo.
DEMO 254 - Bedlam Demo - turn the lights down, the music up and trip...!
DEMO 251 - Great Techno Compilation - 5 brilliant pieces of techno music.
DEMO 248 - Fire Demo - sampled music form the Prodigy. STE & 1 Meg only.
DEMO 247 - It's My Life - the great Dr Alban song - 1 Meg+.
DEMO 242 - Music Dream II - 9 superb 50Khz tunes by E.T. - STE only.
DEMO 231 - Dreams - the number 1 hit single by Gabrielle. 1 Meg+.
DEMO 229 - All That She Wants by Ace of Base - the debut number 1. 1 Meg+
DEMO 225 - No Limit by 2 Unlimited - 1 Meg+.
DEMO 222 - Tribal Dance - another 2 Unlimited hit. 1 Meg+.
DEMO 200 - Grotesque Demo - amazing rave music etc. 1 Meg STE only.

SOUNDTRACK MUSIC

TRAC 115 - 2 Unlimited Rock, Lost Forever, Moonchild, Techno '93.
TRAC 114 - Acidpan, Delight, I Feel Love, No Limit, Popcorn, The Scene, 1993.
TRAC 113 - Boom! And She Cums! Do Ya Trust Me? Know What To Say. STE only.
TRAC 111 - Empty Spaces, Taik yor Tym, Listen 2 The Rhythm, Hardcore. STE only.
TRAC 110 - Midnight at Noon, Watch Your Bass Spin, Hardcore Hypno 4. STE only.
TRAC 107 - Burntout, Deadlock, Ex-Sight, Hey DJ, Lullaby, New Jack Solo.
TRAC 105 - Alright, Daft Trip, Juicy, Moody, Two, Mod 3 (Techno Tunes).

£1.50 EACH
Unless otherwise stated

New Age PDL

UTILITIES (ANY RES)

UTIL 2 - Startgem, Head Start 1.1, DC Clock, Disk Checker, Hard Disk Utils, Ram Disks, Hack 'n' Copy, Turtle 3.0 (HD backup), Megaformat, Memory Test.
UTIL 3 - ST Almanac, Class 3.0 - combinaton spreadsheet/database for teachers, Treesaver - prints several pages on one to save space - good for long docs.
UTIL 4 - Pools 2.5, ST init 3.4, Switcher - loads programs faster, 20 DC utilities.
UTIL 5 - F-Copy 3, DC Showit, Desk Manager, Disk Scan, Mono Emulator 5, Spool, DC Stuffer (loads 32 accs), Speech Synthesiser, Mouse Accelerator.
UTIL 6 - James The Butler, London Phone Codes, MenuSYS, Pinhead, Super Calendar Batch Startup, Auto Sort, Postmortem, No Bombs, E-Disk, 9 Quick Utilities.
UTIL 12 - Jam Packer 4, Wind-XES (Modulator control panel), Satellite 4.01, Clock Set.
UTIL 13 - German to English translator, fast Print, DC Salvage, MiNT, Maccel 3.0.
UTIL 14 - Printer Drivers inc Canon Bubblejet, Qume Daisywheel, Brother + Epson.
UTIL 15 - Calculator, D-Copy 3.08, Directory Printers, Guardian Virus Detector, Label Maker, Recover, Sector Editor, Virus Die, CLI, Diary, Reboot, Mousetrap.
UTIL 16 - Chameleon - loads and unloads accessories without having to reboot, Sticker 3.0 (mono only), Definitive File Selector, Super Virus Killer, Benchmark.
UTIL 19 - Your Second Manual, Jokes, GDOS info, Bombs info + several magazines.
UTIL 30 - Superboot 8.1, Build Your Own Scanner, Report Writer, Disk Cleaner.
UTIL 35 - Cheetah 1.1 (high speed copying util), Rainbow TOS patches, Unarj 2.2.
UTIL 38 - Printer Drivers inc: KXP 1124, Star LC24, NEC Pinwriter, Brother, Canon, Citizen, HP Deskjet, Oki, Qume, Taxan, Toshiba, Riteman, Atari.
UTIL 40 - Loads of packers inc: Atomik 3.5, Automation 5, Dragon 3, Fire 2, Ice 2.4, Pompey 1.9, Speed Packer 2, Branch Always Packer. + Multi Depacker 1.5
UTIL 42 - Intro Maker - mix pictures, sprites, scrolls and music together. Colour only.
UTIL 45 - Kaos Desk 2.01, Terra Desktop 1.36 - replacement desktops.
UTIL 46 - STOS Shoot em up builder kit 0.6 - colour only.
UTIL 51 - Form Finder 2.2 - horse racing predictor which is easy to use. Colour only.
UTIL 53 - TOS Version 1.0 - allows you to run programs that don't run on your TOS.
UTIL 54 - Message Scroller, Archiver Shells, Envelope Printer Demo, Mega Cracker.
UTIL 55 - Spectrum Emulator 1.2 - run Speccy games - includes Hobbit, Manic Miner
UTIL 57 - Revenge Doc Displayer 3.0, Wordfinder 3.0, Desktop.inf configurator.
UTIL 58 - Career Themes Inventory and Personality Tester - great fun!
UTIL 59 - Neodesk patches - upgrades 3.01 to 3.02 and 3.02 to 3.03.
UTIL 60 - JC Label 1.3, Jon-Dos 1.7, Flowchart Compiler, Boot Time 2.0, Multisync.
UTIL 61 - Rename It, Zoo Archiver 2.1, Insert Date, Marrow, Shadow Ramdisk.
UTIL 62 - BJ Chrome 1.1, Desk Master, Crocery Lister, Silk Mouse, Auto Load, Blitz.
UTIL 63 - JC Calendar 0.3 - an extremely pleasant and flexible calendar maker.

BUSINESS (ANY RES)

BUSI 1 - Invoice And Statement Generator demo, Sales Controller - High Res only.
BUSI 2 - Sheet 2.0, Dbase One, First Base 1.6, Home Budget Template.
BUSI 3 - Fastbase 2.0 - demo, fully functioning but with limits.
BUSI 4 - Opus 2.2 - brilliant spreadsheet. 1 Meg+.
BUSI 5 - WG Data, ST Sheet, Visi Clone - three more spreadsheets.
BUSI 6 - Double Sentry Book Keeping System, Address Book.
BUSI 7 - Astubank 1.1 at - complete home accounts system - colour only.
BUSI 8 - G-Base - a graphical database designed for importing graphics. Colour only.

MUSIC & MIDI

MUSIC 1 - Noisetracker 1.5 - a popular soundtracker creator with samples & source.
MUSIC 2 - Samples disk 1. works with most soundtracker creators.
MUSIC 7 - Hacker voice sets and songs for use with Quartet.
MUSIC 9 - Midi Magnet, Chord Master, Keys KMP, TX81z, Satellite (High Res only).
MUSIC 11 - Arpeggiator, Zeppelin, MIDI Beat, Project, Jukebox, MKS-50 - any res.
MUSIC 12 - Henry Cosh Sequencer, Composer - any resolution.
MUSIC 13 - Drum Patterns for Cu-Base in standard MIDI format - any resolution.
MUSIC 16 - Yamaha PSS790 Editor, includes loads of sample voices.
MUSIC 22 - Alchemie Junior 2.2 - sequencer with real-time, multitasking etc. High res.
MUSIC 23 - Sound Merlin - good ex-commercial program, Mozarts Dice Waltz - compose music without musical knowledge. High res only.
MUSIC 24 - Octalyser 8-track tracker - STE only, Protracker 2.1, YM Tracker.
MUSIC 25 - DR T's Omega II demo of their amazing new sequencer. 1 Meg+.
MUSIC 26 - PSS Utilities disk, loads of programs including patch editor, librarian etc.
MUSIC 27 - Casio CZ sounds, 32-track sequencer, Kawai K1 editor, MIDI menu.
MUSIC 28 - Editor and Librarian for Yamaha TX1Z, MIDI rat, Switcher, High res only.
MUSIC 29 - Kawai K1 synth sounds.

WORDPROCESSING (ANY RES)

WORD 1 - ST Writer Elite, EDI Text, Zap ST, ST Page, Typist, Desk Accessories.
WORD 2 - Mail Merger, Spell Check, Large Printer Maker, Count, Double, Convert.
WORD 3 - Font Master Deluxe (High res) - a kind of DTP program in German.
WORD 4 - First Word + tools, Grammar checker demo, Spell Binder, Text Filter.
WORD 5 - Calamus Demo, no save function but you can print. High Res only.
WORD 6 - Redacteur 3 demo - contains everything except for the save function.
WORD 8 - DB Writer 1.4 - slick document processor with spell checker & mail merge built in plus all the usual functions. High Res only.

EDUCATION

EDUC 1 - Kid Music, Kid Notes, Kid Piano, Kid Puzzle, Kid Graph, Rebus Writer.
EDUC 2 - Kid Grid 2, Kid Mixup, Kid Publisher, Kid Sketch, Kid Story, Kid ABC.
EDUC 6 - Maths Made Easy, Kid Shapes, Kid Shapes Plus, Race Cards.
EDUC 7 - Michaels Big Adventure - colourful graphics, easy to play. Age 8+.
EDUC 9 - Bodyshop, Computer School 2 & 3, Butterfly in the Park.
EDUC 12 - English Conjugation System, Pure Logic, Phonics, Key Capers.

THE DEATH OF A PRESIDENT

A three disk set investigating the death of John F. Kennedy, thirty years ago. Faced with evidence of maps, photographs, sounds of the gunshots, and peoples testimonies, what conclusion will you come to? EDUC 13-15.

£4.00

EDUC 16 - Franglais 1 & 2 - French Tutors, Me First 2.0, Numbers, Slimming.
EDUC 18 - Spanish Verb Tutor, World at Risk, About the House, Perfect Match.
EDUC 19 - Computer School 4 - tests reflexes, memory, logic, coordination etc.
EDUC 20 - Easter Egg Hunt - pleasant adventure for 7-12 yrs without violence etc.
EDUC 21 - G.C.S.E. Higher Maths Grade Tutor, Franglais 3 - French Tutor.

C.I.A. WORLD FACTBOOK

Four disks crammed with information about the world, covering 247 nations and their populations. An absolute mountain of knowledge useful for research. Also covers weights and measures and contains a complete Chemistry Reference Book. Amazing!! EDUC 23-26.

£5.00

EDUC 22 - G.C.S.E. Chemistry Tutor - all you need to attain grade 'C' or above.
EDUC 27 - Mastertime - brilliant time tutor, covers analogue and digital + Human.
EDUC 31 - 1900's USSR - a very good interactive learning system.

A ROMAN MYSTERY

Another three disk set, this time investigating a murder that occurred during Roman times. Set out in the same style as JFK, this set features pictures, sounds, and 3D games to help you with quest. EDUC 28-30.

£4.00

SHOESTRING EDUCATION

SHOE 1 - Robot Attack - tests children on their times tables. £2.95.
SHOE 2 - Moon Letters - a nice spelling type game. £2.95.
SHOE 3 - Picture Mix - Age 6+ the aim is to recreate a mixed-up picture. £2.95.
SHOE 4 - Robot Words - a friendly hangman type game for kids. £2.95.
SHOE 5 - Alphabet Mix - like SHOE 3 but with words instead. £2.95.
SHOE 6 - All Blocked Up - A really good maths/shoot em up game. £2.95.
SHOE 7 - Word Race - win races by spelling words correctly. £2.95.
SHOE 9 - Maths Fun 1 - a nice maths game for children. £2.95.
SHOE 10 - Mini Boggle - a good version of the classic game of boggle. £2.95.

PROGRAMMING

LANG 1/2 - Sozobon C Compiler release 2. Includes documentation, shell etc. £3.
LANG 3 - C Source code, loads of routines including documentation.

GNU C++ COMPILER 2.1

This five disk set is archived and will need to be unarchived to a hard drive before use. It also requires at least 2.5 meg of memory. This is intended as a developers version - ie not for novices. LANG 5-9.

£6.50

LANG 11 - GFA Basic programs, includes runner program. ST Basic 1 programs.
LANG 13 - Professional GEM guide - 17 chapters of tutorial with C source.
LANG 16 - STOS Tutorial and various Basic programs.
LANG 24 - C Adventure Toolkit - the very best adventure creator available.
LANG 27 - GFA Basic v 2.0 - GFA Expert - a nice GFA Basic tutorial.
LANG 29 - STOS Tracker - adds a new set of STOS commands for Soundtracker.
LANG 33 - Coronado Enterprises C++ Tutorial 2.0 - 12 chapters + source.
LANG 34 - Pascal Compiler, includes linker, library files, shell + programs.
LANG 35 - Ultimate GFA Database 1.7 - loads of references to GFA articles.
LANG 36 - STOS Extensions: Missing Link, Misty, Blitter, MIDI, STE, + 7 more!
LANG 37 - STOS Software pack 1 - millions (almost!) of routines etc.
LANG 38 - Robert Annets Source Code disk - from the author of Shockwave.
LANG 39 - The complete STOS source code to Pandora's Box.
STOS 7 - The latest issue of STOSSER disk magazine, tutorials, articles, reviews.
BUPRO 2 - 68000 Programmers Library - hundreds of routs for games. £2.95.
BUPRO 4 - Moving Bytes 1 - more routines for screen effects, music, scrolls. £2.95.
BUPRO 16 - ST-68K Reference 3 - includes full data on ST internals, excellent. £2.95.

BEGINNERS GUIDE TO STOS BASIC

This is a compete programming course for all ST/STE's consisting of a 618 page, ring bound course manual plus two double sided disks with over 190 programming examples! 26 chapters will take you through step-by-step how to create shoot em up's, art programs, junior educational programs, GCSE maths programs, databases, word processors, music programs, and much, much more. Recommended retail price is £39.95 plus postage but we are doing it for an amazing £29.95 plus postage (£3.00 UK only) and you may also choose THREE FREE DISKS from this advert.

£29.95

POSTAGE RATES:

UK: FREE
EUROPE: 15p PER DISK
REST OF WORLD: 50p PER DISK

FREE ST CATALOGUE WITH FREE SOFTWARE FOR NEW CUSTOMERS UPON REQUEST

PLEASE RUSH ME THE FOLLOWING DISKS:

DISK CODE	PRICE (£)
SUB-TOTAL 1 (£)	

ST CATALOGUE ☐
FALCON CATALOGUE ☐
KEYSOFT GAMES (£2.50) ☐
SEDUCE 2 STE (£7.50) ☐
SEDUCE 2 STFM (£7.50) ☐
DEATH OF A PRESIDENT (£4.00) ☐
C.I.A. WORLD FACTBOOK (£5.00) ☐
A ROMAN MYSTERY (£4.00) ☐
GNU C++ COMPILER (£6.50) ☐
STOS BASIC GUIDE (£29.95) ☐

SUB-TOTAL 2	
POSTAGE	
TOTAL	

Name .....
Address .....
.....
.....
.....
Postcode.....
Telephone .....

SEND YOUR ORDER TO: NEW AGE PDL (DEPT STR8), P.O. BOX 30, LEIGH-ON-SEA, ESSEX, SS9 4AD

PD ZONE

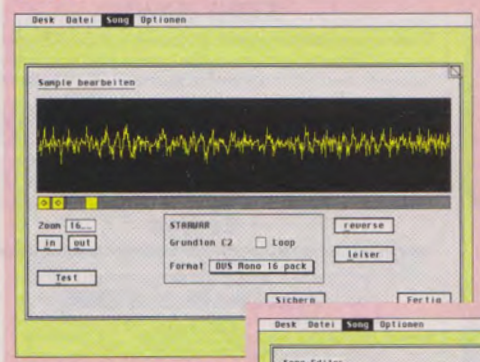
MJUZAKK

GOODMAN INTERNATIONAL • DISK NO: GF.47 • £3.25 • MEMORY: 1MB • SHAREWARE • FALCON ONLY

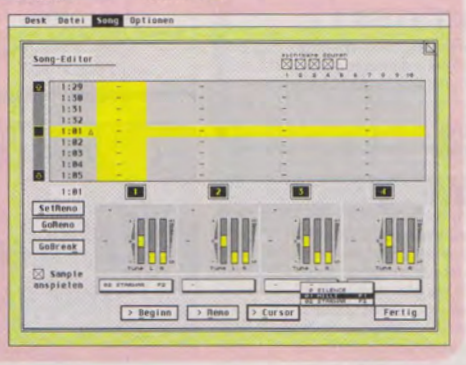
IN BRIEF: *Soundtracker* revolutionised the art of digital music making. A variation on its interface can be found on almost every machine available, and *Mjuzakk* is the first program to bring its familiar four column editing screen to the Falcon.

In common with all good German software these days, the interface is very sleek and uses GEM to put its point across. And not only does it look good, it's packed with features too; there's a built-in sound editor, which makes it easy to filter out any pops on looped samples and it's also possible to apply a limited range of effects, such as "reversal". The only real problem is the loading routine, which is painfully slow – the demo tune takes about five minutes to drag from floppy disk! The program should run on a 1Mb machine, but to do anything useful you will almost certainly need 4Mb.

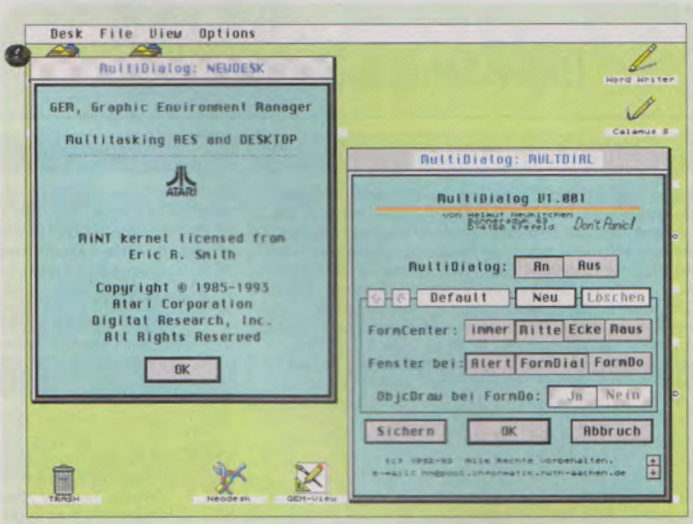
ST REVIEW COMMENT: "*Mjuzakk* shows real promise, although it has got a little way to go before becoming an essential purchase. Perhaps some form of *Soundtracker* module import would be a good idea."



The sample editor is a no frills affair, featuring a few basic effects and nothing more.



The editing screen follows the soundtracker layout, but is much classier in its new, colourful GEM guise.



Your MultiTOS desktop need never be a dull place again with a copy of 3D Button. Like, wild man!

3D-BUTTON

FLOPPYSHOP • DISK NO: F.3982 • £3.00 • MEMORY: 1MB • FREEWARE • FALCON ONLY

IN BRIEF: *MultiTOS* signalled an end to the days of dull, monochrome GEM, but Atari's new grey colour scheme is just a bit reserved for most people.

3D-Button is the solution. It sits as a module within the *Control Panel* and allows you to adjust the shade of dialogue box backgrounds and buttons. Any of the standard sixteen GEM colours can be used and it's all coordinated through a bank of three sliders – in fact, it's very similar in feel to the "window colour" control panel. All of the adjustments are immediately effective, so you can experiment with different schemes to your heart's content.

Some of the effects are also usable under normal TOS and, of course, the utility works equally well for nostalgia freaks who want to get rid of the 3D-look and revert everything to black on white.



3D Button slots nicely into X-Control with all of your other juicy CPX modules.

ST REVIEW COMMENT: "It's certainly not going to make your Falcon any more productive, but *3D-Button* is a utility you just have to own. Even more incredible, it weighs in at a paltry 5Kb!

LEFT DONUT

FLOPPYSHOP • DISK NO: F.3934 • £3.00 • MEMORY: 4MB • PUBLIC DOMAIN • FALCON (RGB) ONLY

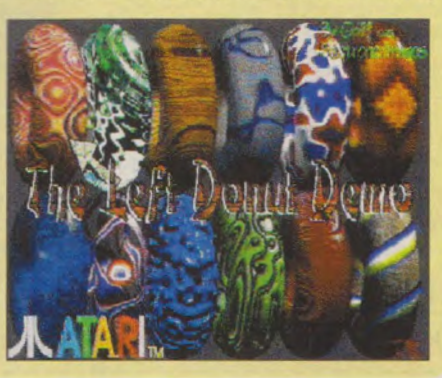
IN BRIEF: Demo programmers have been quick to embrace the Falcon and *Left Donut* is the first offering from Griff of Electronic images. The show starts with a true-colour texture mapped picture and then moves quickly on to display a series of 3D gouraud shaded objects.

Four or five tunes line the length of the demo and some are so atmospheric it almost has you in tears – they're really that good. The sound quality is truly monstrous through a stereo system and the demo is worth getting for this aspect alone.

And that's it really – the tunes slink along in the background, the shapes change and then it begins to get a bit dull. Another demo by the same author is also included on the disk which displays a rotating globe of "points" – very clever but not very entertaining.

ST REVIEW COMMENT: "*Left Donut* is one of the best Falcon demos so far. However, like so many others, it sounds like a million dollars but looks like only a few hundred thousand!

The choice is yours, but everybody deserves to hear this music at least once in their life."



Left Donut's (deep breath) realtime gouraud shaded polygons may leave you cold, but the music most definitely won't!

CUT OUT 'N' SEND COUPONS

To make your New Year just a little happier, why not order some of the public domain programs you've just read about...

L.A.P.D.,
P.O. Box 2,
Heanor,
Derbyshire,
DE75 7YP

ATARI ST REVIEW

NAME.....

.....

ADDRESS.....

.....

.....

- ❑ ROUTE FINDER £1.50
- ❑ CONQUEST £3.00
- ❑ ARTHUR OF THE BRITONS £3.00
- ❑ TRACKBALL £1.50

Floppyshop ST,
P.O. Box 273,
Aberdeen,
AB9 8SJ

ATARI ST REVIEW

NAME.....

.....

ADDRESS.....

.....

.....

- ❑ GHOSTSCRIPT £5.00
- ❑ OSCAR BURMAN GAMES £2.50
- ❑ 3D-BUTTON £3.00
- ❑ LEFT DONUT £3.00

Goodman Int.,
16 Conrad Close,
Meir Hay Estate,
Longton,
Stoke-on-Trent,
Staffs,
ST3 1SW

ATARI ST REVIEW

NAME.....

.....

ADDRESS.....

.....

.....

- ❑ BEFORE DAWN £2.75
- ❑ MFP MUSIC £2.75
- ❑ CARDS DELUXE £2.75
- ❑ B-STAT £2.75
- ❑ H-MEC £2.75
- ❑ MJUZAKK £2.75

Emerald City,
P.O. Box 28,
Southampton,
SO9 7HS

ATARI ST REVIEW

NAME.....

.....

ADDRESS.....

.....

.....

- ❑ THE BOOK OF TESTS £2.50

New Age PDL,
P.O. Box 30,
Leigh-on-Sea,
Essex,
SS9 4AD

ATARI ST REVIEW

NAME.....

.....

ADDRESS.....

.....

.....

- ❑ RDD 3 £1.50
- ❑ OP. BLUE SUNRISE £1.50
- ❑ JIGGSY £1.50

Tumblevane PDL,
6 West Road,
Emsworth,
Hampshire,
PO10 7JT

ATARI ST REVIEW

NAME.....

.....

ADDRESS.....

.....

.....

- ❑ TRODONIANS £1.50
- ❑ GUTENBERG £1.50
- ❑ COMPACT DIRECTORY £1.50

Merlin PD,
11 Grange Close,
Minchinhampton,
Stroud,
Glos.,
GL6 9DE

ATARI ST REVIEW

NAME.....

.....

ADDRESS.....

.....

.....

- ❑ TRIADS £1.25

SHORT CUTS

A new year and a fresh selection of necessary products for your ST...

PRODUCT NAME	RATING
ST A/B BOOT SWITCH	✪✪✪
PAINTSHOP PLUS	✪✪✪✪
TABBY GRAPHICS TABLET	✪✪✪✪
TEDDY-TERM	✪✪✪✪

SCORING

All products in this section have a rating out of five stars.

✪✪✪✪✪ = ***An absolute essential for your computer...***
✪✪✪✪ = ***Great product – well worth investing in!***
✪✪✪ = ***Nice item – but you could live without it.***
✪✪ = ***Not really – unless it happens to be your cup of tea...***
✪ = ***Definite turkey – avoid like the plague!***



Simple switch – the solution for all you single-sided disk drive owners...

ST A/B BOOT SWITCH

Review by Jane Plessey

As *ST Review* still gets letters from readers bemoaning the fact that they can't load our cover disks, it's fair to believe that there is still a proportion of you with a single-sided internal disk drive. Now while many of you may have a double-sided external version, this is useless if the copy protection on a disk requires it to be found in drive A. Yes, there are Auto folder programs that make the external drive behave as if it were mounted internally but a software solution is rarely as good as a hardware alternative. Which is where the ST A/B Boot Switch comes in. A flick of the lever ensures that any disk searching for drive A automatically goes to the external drive.

Installation is quite awkward and requires your ST to be stripped down to circuit board level. This immediately removes such a kit from the domain of the majority of the public. As the 40-pin Yamaha YM2149 chip handles output functions such as this, it has to be located at the right rear and two of the pins desoldered and bent upwards. This step is certainly fraught with danger; unless the pins are completely desoldered, pulling them through the circuit board could easily tear the track on the underside.

The rest is quite simple – two leads solder into the holes, the other two to the bent up pins and the ST's casing is drilled to accept the switch.

The single A4 instruction sheet is perfectly clear and anyone *au fait* with a soldering iron should be able to carry out the process. At just £4.99, the ST A/B Boot Switch is far cheaper than a replacement disk drive – and practically as cheap as a PD disk containing a software alternative. Worth considering.

PRODUCT:	**ST A/B BOOT SWITCH**
CONTACT:	**LADBROKE COMPUTING**
TEL:	**0772-203166**
PRICE:	**£4.99**
RATING:	✪✪✪

PAINTSHOP PLUS

Review by Keith Berry

Not unusually for a program of German origin, the author of *Paintshop Plus* chose resolution at the expense of colour as it runs in mono only in a minimum of 1Mb of RAM with TOS versions 1.04 or later.

The first sight of its rather simple menu boxes and the sparsity of its drop down GEM menus gives little indication of the sophistication of its functions. Basically a bit-image drawing program using just three screen-sized work screens, it can handle a wide variety of monochrome file formats including .IMG files of screen size or smaller, and there is an Archive feature to handle up to 30 pictures at once. The usual drawing tools are all there, selectable from three menu boxes that follow the cursor around the screen, plus a few welcome extras such as vertical or horizontal only lines. Almost all have adjustable or user-definable parameters available from a row of icons at the foot of the screen.



Paintshop Plus – vector fonts, bezier curves and gradient fills at a giveaway price.

Bezier curve polygons can be drawn and then edited point-by-point before finally clicking into place using an unusual left then simultaneous right mouse click. For drawings of a technical nature, dimensions can be automatically marked with their lengths although there no on-screen rulers. Among the usual fill patterns with editor there is an excellent Gradient fill, which can shade in eight compass directions as well as centre highlight or shadow, and all in either fine dither or coarse raster format.

The *Magnifier* is more than just a pixel editor, being equipped with an array of drawing tools. Regular or irregular sections of the screen can be installed in up to three "Objects" to be called up when required or individually saved to disk. The Block functions are versatile and include Move and Copy, perspective distortion and the automatic creation of a configurable wavy flag from any rectangle.

Text can be added either using the bit-image typefaces provided, Signum fonts, or in a very novel manner. Using the provided selection of vector fonts, text can be typed into a dialogue box, the font and its angle selected and then a box drawn on-screen of the size required. The program then fits your text exactly into that box as a bit-image. The Undo function cancels everything since the current menu item was selected so there is plenty of scope for trial and error.

The program itself has been (mostly) translated into English and sixteen pages of an English manual accompanies the German text on the disk, which is already well stuffed with fonts, sample pictures and drivers for the popular printers. For the purpose of printing only, any two of the three screens may be joined vertically. The program is compressed to fit the disk but *DC Squish* is included to enable it to be returned to normal for faster loading on a hard drive. For programmers, GPL routines may be run within *Paintshop* and a GPL editor is provided.

The program remained bomb free throughout the test, but on two occasions it froze while attempting to gradient-fill a tiny area. In almost all respects



Good block functions and perspective distortion make pictures like this easy to achieve.

Paintshop Plus v2.03 stands up well against its commercial brethren with the advantage of being very easy to use. Drawbacks are very few: Drawings are limited to screen size, there are only three workscreens irrespective of available RAM, and the transfer of blocks from screen to screen is impeded by having to go via the Object menu. At £15, such restrictions pale into insignificance.

PRODUCT:	**PAINTSHOP PLUS 2.03**
CONTACT:	**NEW AGE PDL**
TEL:	**031-556 6479**
PRICE:	**£15**
RATING:	✪✪✪✪

TABBY GRAPHICS TABLET

Review by Maurice Collins

Not everyone likes the mouse. It might be fine for navigating your way around the desktop but when it comes to drawing and painting, it isn't anywhere near as accurate as a pencil for finely detailed work.

Enter the Tabby, an A5-sized graphics tablet that consists of a flat but slightly angled plastic surface, 170 by 145mm in size, plus a pen-shaped object attached to it by a thin lead. The two piece tabby is made of rigid grey plastic and is attractively packaged with a pen holder and 14 page Atari-specific manual.

It plugs into the ST or Falcon's serial port (working at 9,600 baud, incidentally) and when the driver program is installed in the Auto folder, it propels the mouse pointer around the screen in response to movements on the tablet. Note that the serial connection is the industry standard 9-pin variety as used on the Falcon. ST owners will need to purchase a separate adaptor.



Feline friend – Tabby offers a solution for fine graphics work on your computer.

Tabby can be used alongside a mouse or it can replace it entirely. One advantage is that the position of the pointer on the screen is relative to the position of the pen on the working area of the tablet, an area some 128 by 96mm in size. In other words the pointer never vanishes from the screen. The disadvantage is that the pen itself is less easy to grab when you're in a hurry so when using applications like word processors that involve moving your hand from the keyboard to the pointing device every so often, Tabby is much less handy than a mouse.

To simulate a mouse click, pressure on the Tabby is increased so that the flexible tip bends slightly until an audible click is heard. A double click is achieved by holding down another key. This can either be the <Shift>, <Alternate> or <Control> key, depending on how you set it up using the Tabby configuration accessory. All sorts of other factors can be altered using the accessory, including the effective tablet area and pointer acceleration.

I was pleasantly surprised by the Tabby. Far from being another useless add-on likely only to appeal to a handful of users, it turned out to be the fastest and most responsive pointing device I've come across, particularly for graphics and paint programs. Although it would never replace my mouse, I would certainly turn to it for drawing and painting. There are also some interesting possibilities in educational software – letter forming and handwriting practice to name but two.

PRODUCT:	**TABBY GRAPHICS TABLET**
CONTACT:	**CGS**
TEL:	**081-679 7307**
PRICE:	**£49.95**
RATING:	✪✪✪✪

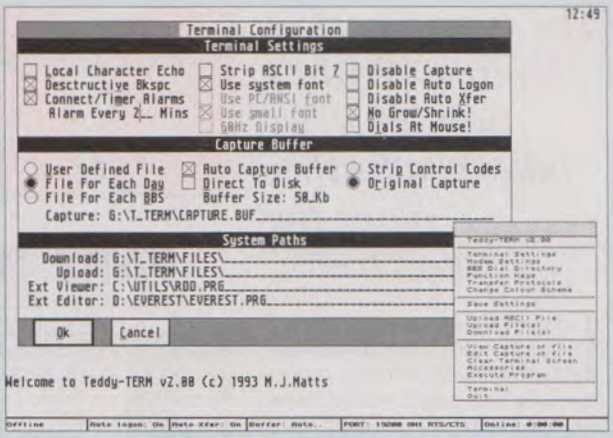
TEDDY-TERM

Review by Mark Baines

What makes any terminal different from another? Apart from some features which 90% of people don't use, or only very infrequently, the most important aspect of any terminal program is the interface.

Freeze-Dried Terminal is one of the best on the ST but its quirky, home grown interface and multitude of dialogue boxes doesn't inspire new users to comms. As one of the UK testers and after years of using it, I still have no idea what all the options in *Init Strings* do!

What most comms users need, especially new ones, is a program to log on to a BBS and get out again safely, cheaply and with the minimum of fuss – you don't want to spend weeks working out how to use the program beforehand. Basic functions should be clear: save a session to a file to read off-line, download files at the click of a button and have the program set up sensible defaults to the terminal, modem and dialling configuration are the obvious ones. Add decent documentation for when things go wrong and explain when some sophisticated



Ready Teddy Go – full-featured program for those new to the world of comms.

features are needed and you may be left thinking that such a program is impossible. But exist it does in the guise of *Teddy-Term 2* from Mark Matts.

Teddy-Term 2 has an interface with the simplicity of *Uniterm* or *DTerm*, a full screen terminal (except for a single status line) which works on the ST with OverScan or on large screens. All features can be accessed with the mouse or keyboard and all dialogue boxes are moveable. The left mouse button presents a nice pop-up control menu or you can press the <Help> key and double-click on the list of items shown or use the keyboard shortcut. The right mouse button brings up the file selector – useful if you have *UIS III*.

There is the standard autodialler where each entry can have separate serial port and modem settings, user name, password and auto-logon strings. When you log on to a new board, *Teddy-Term* can automatically learn the first input sequences for auto log-on in the future. These can be easily edited and chain dialling is also available. The capture buffer features are extensive – especially useful is the ability to size it, have a separate file for each BBS or day and view/edit at any time.

The editor and viewer are external programs of your own choice, a great idea which means you can use your favourites rather than have to struggle with yet another editor. Other external programs can be run and the program comes set up to use the *XYZ* and *Jekyll* file transfer programs (not supplied) – better the devil you know...

Up to forty macros are available to enter text strings or run programs. An alterative font is available enabling 48 lines in high resolution. A timer can be set to go off at predetermined intervals to remind you of how long you've been on-line. Nice!

The docs consist of a well laid out and informative text file. Registration is £5 or whatever you can afford – even a couple of disks of new PD software for Mark's BBS.

Teddy-Term v2 is wholeheartedly recommended as *the* terminal for new users to comms and if you're still using *Uniterm*, *Vanterm* or struggling with *FzDT* give it a go!

PRODUCT:	**TEDDY TERM 2**
CONTACT:	**LOCAL BBS/ST CLUB (DMG38–£2.50)**
TEL:	**0602 455250**
PRICE:	**SHAREWARE – £5**
RATING:	✪✪✪✪

BEAT THE

PART TWO: CREATING A BOOT-UP DISK

The second part in Andrew Wright's tutorial series takes you further along the expert trail...

Last month we looked at the way the ST starts up, something known as the booting procedure, and had a brief tour of some parts of the desktop. This month we'll continue in the same vein with the object of creating our own boot disk.

Why a boot disk? If you boot up without a disk in the drive, you can spend a long time looking at the screen. With a disk in the drive, even a blank one, booting is much quicker. However, there are three special things that a boot disk can do to fine tune your desktop. When you start your ST with a floppy disk in the drive, the first item it looks for is a folder called AUTO. If there is one, it tries to run the programs inside in the order in which they were put there. It does this before you even see the desktop. Next it looks for files with an ACC extender (that's the last three letters of the file name after the full stop) and attempts to load these as desk accessories. These are essentially programs that are loaded into memory ready to be called up whenever you click on its name under the desk menu. Finally it looks for a file called *DESKTOP.INF*, which contains all kinds of settings for the position of icons and windows. We'll look at this briefly later on and in more detail another time.

Having a customised boot disk can make your ST easier to use and more powerful – provided you have the right programs and accessories, of course.

THE FIRST STEP

The first thing to do is format a blank disk. If you can't do this, look at the accompanying box. Next add an AUTO folder to it – again use the panel if necessary.

Next we're going to copy some files across from one disk to another. As an example, I'll use the ST Language disk which came with your computer but the principle holds true for any disk.

The first thing to do is switch to medium resolution if you're working with a TV set. There just isn't enough space in low resolution to open two windows comfortably. Check back to last month's tutorial for how to do this (or look under the **Options** menu for the **Set Preferences...** dialogue).

Insert the Language disk in the disk drive having made sure the disk is write protected – in other words you can see through the small hole in the corner. Double click on the drive A icon until you see a window headed by **A:**. Arrange the window as showing in Figure 1, using the size box (bottom right) and the move bar (along the top). Next, double click on the drive B icon and when asked to insert disk B, insert the newly formatted disk, click on OK and resize the window in the same way. Now you can see two lists, one reflecting the files on disk A and the other those on disk B. With careful sizing you should also be able to see the file size. If the windows were larger you could see the time and date each file was created but this is rarely of any use, particularly as the ST still thinks it's 1989 unless you actually tell it otherwise every time you boot up!

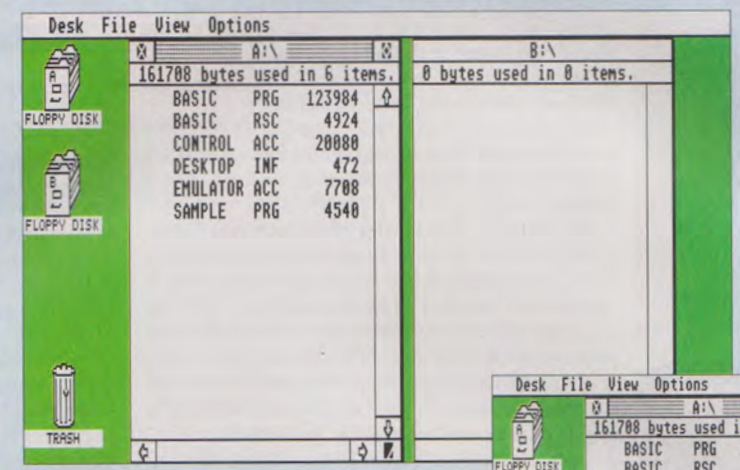


Figure 1: Preparing to copy some files from one disk to another.

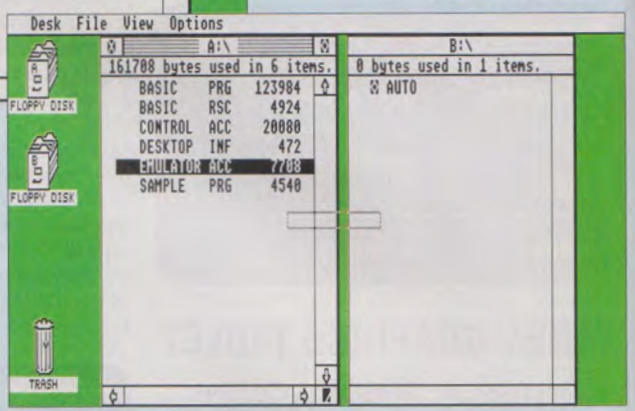


Figure 2: Dragging files between disks.

Next we're going to copy a file from the Language disk, an accessory called *EMULATOR.ACC*, onto the blank one. Put the Language disk in the drive, and select the file in the **A:** window by placing the mouse pointer over it and pressing the left mouse button, keeping it pressed down until you see a dotted line appear around the first part of the name. Now, still keeping the mouse button pressed down, drag the dotted outline until the pointer is over the **B:** window and let go. What you have, in effect, said to the ST is copy this file to this disk (Figure 2).

The end result is a dialogue box asking you to confirm whether you want to copy the file (Figure 3) followed by some disk activity as the ST reads a copy of the file *EMULATOR.ACC* into its RAM, or random access memory.

Another dialogue (Figure 4) then pops up asking for you to insert disk B into the drive. Now disk B is the blank disk, so take out the Language disk, insert the one you've just formatted and click on OK.

The ST now writes a copy of the file from its own memory onto the disk and that's that. What happens to the file still in memory? Actually nothing at all, it's still there but the ST simply forgets about it and effectively wipes it away. You now have a copy of *EMULATOR.ACC* on the original language disk and a copy on your boot disk. You can now repeat the procedure with other accessories and files. To copy AUTO programs from

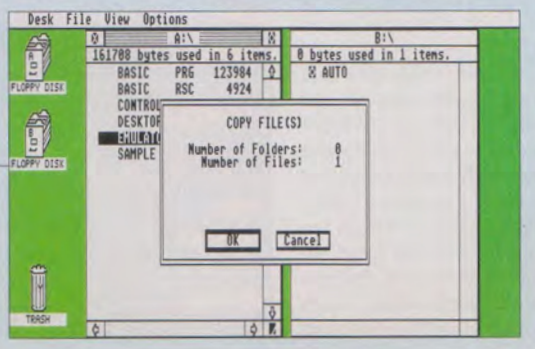


Figure 3: The Confirmation dialogue box.

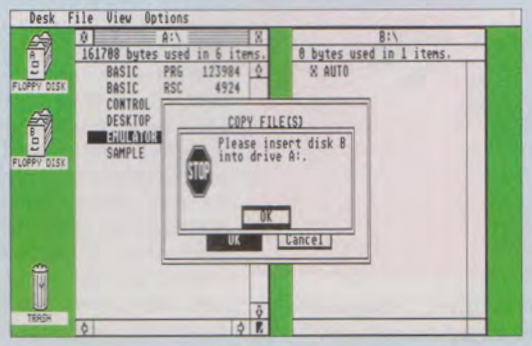


Figure 4: Insert disk B to continue copying.

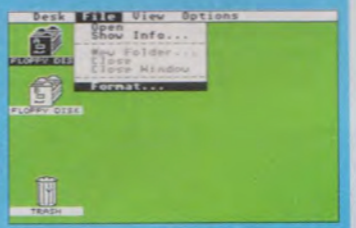
SYSTEM

FORMATTING A DISK

Here is the simplest and least confusing way of formatting a disk. Make sure your ST's drive is empty and switch on the machine. Whistle a tune for a minute or so while staring at the blank screen (sorry about this but we haven't yet made a boot disk to speed up the loading process and if you insert another disk, odd things might happen).

Once you see the desktop, insert the disk you intend to format. If it has already been formatted, it makes no difference, but if it has anything important on it like a game or another program, put it safely away. Use only a brand new disk or one you are certain is a spare.

Figure 5: Formatting a disk.



Now select the drive A icon, move the mouse under the **File** menu and select the **Format...** option as in Figure 5.

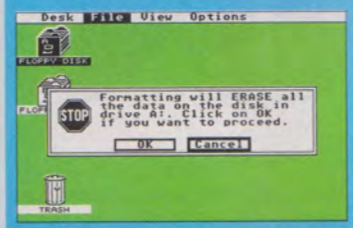
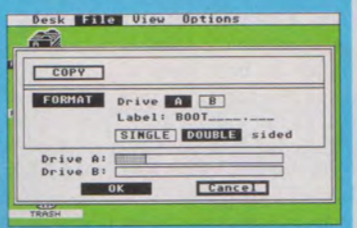


Figure 6: Last chance to change your mind!

Next you'll get a warning as in Figure 6. Last chance – if you're sure you don't need what's on the disk click on "OK".

Figure 7: The disk formatting and copying dialogue box.



Next to appear is the disk formatting and copying dialogue box shown in Figure 7. If you have an early version of TOS, it may look a little different but functionally it is about the same.

Where the dialogue says **Label:**, you can type the name of the disk – "BOOT" seems as good a choice as any. Note that this is purely optional and never necessary. I'm told that if you have a single-sided drive, the double-sided option is greyed out – having not seen a single-sided drive for years, I can't confirm this. Whatever, make sure the double-sided option is highlighted, if possible, and also the drive A button. Clicking on "OK" starts the drive humming and the bar in the lower half of the dialogue will start filling up illustrating how much of your disk is formatted.

When the formatting is complete, you'll see a dialogue box like Figure 8. Check the number of available bytes carefully. Very occasionally a different, lower number will appear. This means the disk has some dodgy sectors on it which the operating system has marked as such and ignored. Don't trust such a disk – throw it in the bin or use it only for unimportant data.



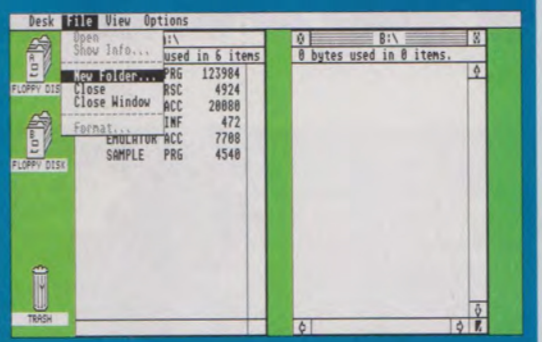
Figure 8: The finished job.

your master disks into the AUTO folder, you simply drag the files onto the AUTO folder itself, making sure it is highlighted (turns black), instead of dragging them over the **B:** window.

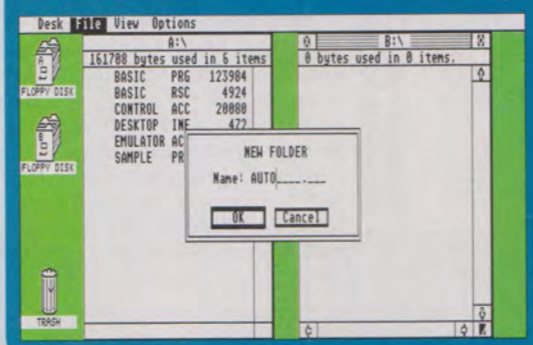
One last thing. Under the **Options** menu there's an entry called **Save Desktop**. With the new "boot" disk still in the drive, close the drive B window using the top left hand button, click on **Save Desktop** and after you're asked for confirmation, the ST will save a new file called *DESKTOP.INF* on the disk. This includes all sorts of information, including the position of your windows. If you now press the reset button, with the disk still in the drive, you'll see the ST boot up again very quickly – with your desktop layout the same as it was before. No need to resize the windows every time you boot up! You're ready to copy more files whenever you like...

CREATING A NEW FOLDER

Creating a new folder is pretty straightforward. Make sure the topped window, the one with the grey bar along the top and the buttons visible in each corner, shows the directory where you want the folder to be created. For a blank boot disk, it should simply show A:\ at the top. From the File menu select New Folder... and then enter the name (AUTO, if you're following the boot disk instructions). Finally press "OK" and the folder appears in the window.



Step 1 – create a folder



Step 2 – enter the name

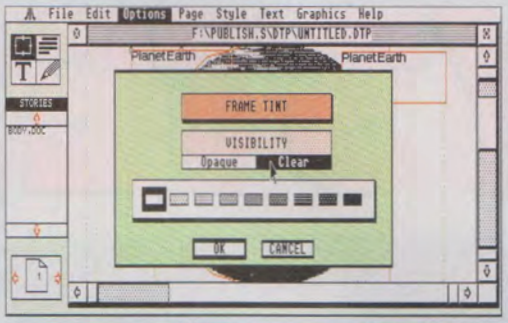
THE STE TOS

There are two main types of TOS to be found in STEs: an early version (TOS 1.6 or TOS 1.61) with an unbelievable bug in it and a later version (TOS 1.62) without. If you've got an STE and have followed the instructions to make a boot disk with a *DESKTOP.INF* file on it, but found that your machine refuses point blank to boot up in anything other than low resolution, don't worry. You probably have the early version of the operating system. There is a small patch program, available from all good PD libraries or direct from Atari, that you copy into your AUTO folder. This solves the problem and lets you save a medium resolution desktop safe in the knowledge that next time you boot up, the same desktop will appear.

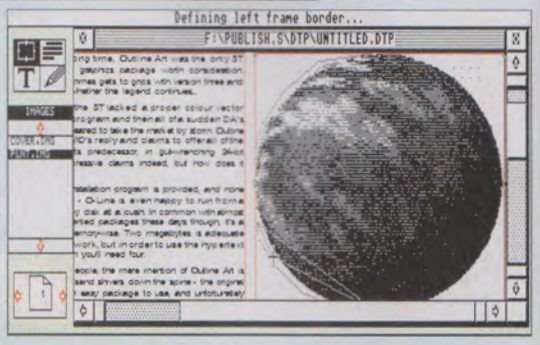
In his continuing quest for the perfect page design, Nial Grimes takes a look at the effective use of fonts and graphics...

Part of the joy of DTP is the lack of rules – don't let anyone tell you otherwise. No guidelines should take away the excitement of brewing your very own innovative page design and pushing back the boundaries of convention.

Having said that, there are plenty of hints and tips that can help you to avoid the rookie snares and create designs that will be both powerful and effective. Last month we blew the dust off a few desktop publishing terms; let's put the knowledge into practice with a look at how to use fonts and graphics within a page design...



As your designs become more complex, some frames will begin to overlap – use a clear tint to allow lower elements to show through.



Clicking "define border" will allow you to draw the path that the text will follow.

A WORD IN

TYPE CONCERNS

Fonts are the most important part of any page – it's through words that the whole message of your design will be conveyed. The sheer flexibility that desktop publishing offers in the type department creates several pitfalls for the prospective layout artist.

One of the easiest mistakes to make is that of using too many fonts. After all, with a package capable of using dozens of exciting typestyles, the temptation is to use every single one in the first design – not a clever idea.

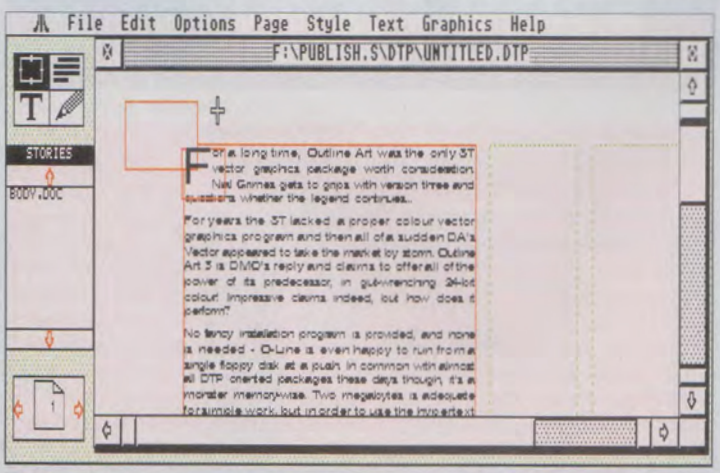
There are no hard and fast rules about how many fonts should be used within a document, but it helps to bear in mind the fundamental aim of any design – to put across a message clearly and concisely.

With that principle in mind, you'll find that the major "type" decisions become a lot simpler. The body text must be readable and so will not be set in a decorative font; the leading will be nice and wide to give the page a relaxed, attractive appearance; and so on. There are plenty of pitfalls on both sides of perfection – too few fonts can look almost as bad as too many – but by casting a critical eye over your own work the basics of effective font use can be learned very quickly.

The size and style of fonts can also play a big part in putting a message across. Once again, it makes sense not to go mad and use dozens of different sizes within the same page because that will confuse the reader. Far better to choose a standard set of sizes and use them consistently throughout the whole document. *Timeworks* sets up a default range of paragraph styles and it's a good discipline to stick with four or five to start off with.

Often it's enough to use a style rather than a new size – bold, italic or underlining can make a big impression without detracting from the overall balance of the page.

Good use of headlines and styles can help to guide the reader's eye in the right direction, but a method is needed to tell him where to start. In larger publications, this simple task falls to the "drop cap", a much larger letter positioned at the start of the body text. Believe it or not, drop caps are very easy to create with *Timeworks*, and most other desktop publishers for that matter. The secret lies in the careful use of "repel text" which can be found lurking under the "Options" menu. It's easiest to use two different frames – one for the large letter itself and another to flow the text around. Both will need to have a transparent "tint" and the drop cap itself must not have repel disabled – take a look at the screen grab and all will become clear.



Drop caps are easy when you know how – a single frame is drafted in to contain the letter itself and another to repel the text.

IMAGE MAKING

The same "repel" technique can be used to run text around graphics frames as well. For example, by placing a screengrab in front of a text frame, the words will automatically shift out of the way and flow smoothly around the edge. Be sure to give the graphics enough leeway, otherwise you'll end up with a very uncomfortable page.

This is just one practical way that pictures can be effectively integrated with text – there are plenty more. Desktop publishers are very clever when it comes to dealing with images. As we learned last month, they can import a plethora of different formats and the nice thing is that the full resolution of an image is maintained at all times – one copy is used to draw the frame on-screen and another when it comes to printing out the page.

In practical terms, this means keeping images small if resolution is lacking. For a Degas screen to use the full resolution of an Epson FX printer it needs to be a quarter of its original size – that is, double the resolution horizontally and vertically. On a laser

TIMEWORKS TIPS

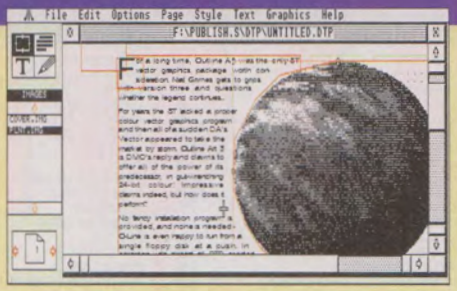


- **Editing pictures: Every now and again a few stray pixels will make their way into a picture. Use the "Edit picture" menu option to screen them out.**

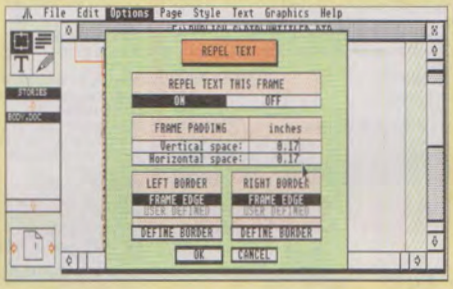
- **Adjusting frame tints: If overlapping frames are causing headaches, try switching to a clear tint. This allows other elements to peep through.**

- **Text flow around irregular shapes: To define your own custom repel-border for a frame, choose "Define border" from the "Repel text" dialogue. Plot as many points as you need to around the shape, and then complete the operation by double clicking the left mouse button.**

- **Frame padding: Closely related to text flow is "frame padding" which can be adjusted through the "Repel text" dialogue. This setting dictates how much leeway Timeworks should allow around a repel frame.**



This is the result of defining your own repel border. Separate shapes can be set up for both the left and right of the frame.



Be sure to give pictures enough room to breathe otherwise the page will look untidy and the text will be hard to read.

YOUR EAR...

printer, the same picture would need to be one eighth of its original size – get the idea? Often the whole picture is not needed. For example, from a full photograph you might only need the face. This too is easily dealt with by any desktop publisher worth its salt. The process is called "cropping" and typically involves just dragging the mouse over the area you want to keep. The original picture is kept safely in memory and can be restored by simply clicking on its name in the *Timeworks* browser.

There are fewer guidelines when it comes to actually using pictures within documents. A good piece of artwork is rarely out of place and can relieve the monotony of piles upon piles of endless words. Just remember the three golden rules: it should be properly sized to keep its quality, the subject needs to be relevant and it must be given room to breathe otherwise the overall effect will be lost. With regard to the second point, public domain libraries are a superb source of predrawn artwork.

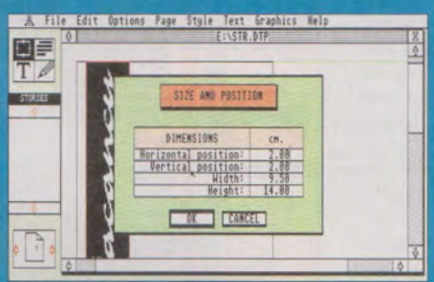
With a little bit of luck, you now understand the basic mechanics of desktop publishing – what a font is, how and where to use them, plus the basics of employing pictures within documents.

Next month we'll go on to look at bringing all of these building blocks together in a well balanced, powerful page design. Be there or be an equilateral rectangle!

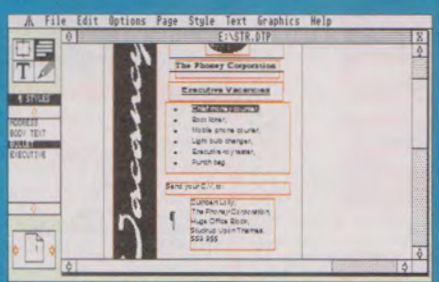
STEP BY STEP

Adverts are a very popular use for desktop publishers, so let's whip up a quarter page design bearing in mind the font and graphics lessons learned in this month's tutorial...

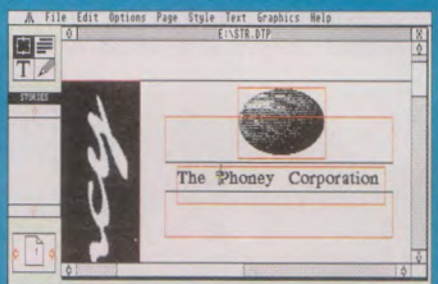
READ ALL ABOUT IT!



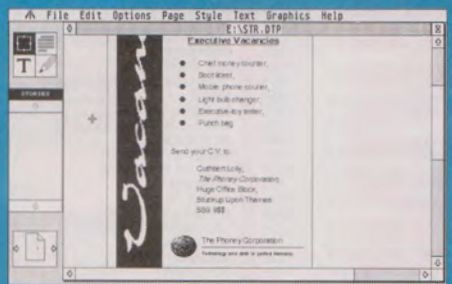
1 *Impact is the name of the game when it comes to advertising, so a suitably striking headline is used to prise the reader's attention away from the competition.*



3 *Next the main body of the advert is slotted into place. The standard Timeworks bullet paragraph-style is adjusted to 10-point Sans and used to highlight the vacancies themselves.*



2 *The company logo is given pride of place at the top of the design. It consists of a nice piece of clip art, the name and two semi-bordered frames.*



4 *Finally, a reworked logo is positioned at the bottom of the advert. Notice that only two basic fonts are used throughout the design.*

fantaSTic prices

Fast-response Mailorder
10am–10pm 7 days a week
No credit card surcharges
Always a person–never an answerphone!

VISA MasterCard EUROCARD

Games Centre
10am–8pm Monday to Friday
10am–4pm Saturday
2 minutes from Old St. Tube station, take exit 2

Games

2-HOT 2-HANDLE (COMP)	21.95
3D CONSTRUCTION KIT 2	35.99
3D POOL	7.95
A.T.F. II	7.95
ACTION MASTERS (COMP)	21.95
ADDAMS FAMILY	7.95
ADVANCED DESTROYER SIM	7.95
AIR SEA SUPREMACY (COMP)	22.95
AIR SUPPORT	9.99
ANCIENT ART OF WAR IN THE SKIES	24.95
ANOTHER WORLD	18.95
APOCALYPSE	22.95
ARCHER MACLEANS POOL	18.95
AWARD WINNERS (COMP)	18.95
AXEL'S MAGIC HAMMER	6.96
B-17 FLYING FORTRESS	24.95
BALL GAME	4.95
BARBARIAN II (BUDGET)	6.96
BARBARIAN II (PSYGNOSIS)	15.96
BAT 2	24.95
BATTLE CHESS	8.95
BATTLEHAWKS 1942	12.95
BEASTBUSTERS	4.95
BIG NOSE THE CAVEMAN	6.96
BILLIARDS 2 SIMULATOR	18.95
BITMAP BROTHERS - VOLUME 1	18.95
BLUE ANGELS	7.95
BONANZA BROTHERS	14.95
BRIDES OF DRACULA	6.96
BUBBLE BOBBLE	6.96
BULLYS SPORTING DARTS (1MB)	7.95
CAESAR	21.95
CALIFORNIA GAMES II	7.95
CAMPAIGN	24.95
CAMPAIGN 2 (1MB)	24.95
CAMPAIGN MISSION DISKS	12.95
CANNON FODDER	21.95
CAPTAIN DYNAMO	6.96
CAPTIVE	12.95
CARTOON COLLECTION	18.75
CASTLE MASTER	6.96
CASTLES	21.95
CHAMPIONSHIP MANAGER '93 (1MB)	18.95
CHAMPIONSHIP MANAGER '94 SEASON DISK	7.95
CHAOS ENGINE (1MB)	18.95
CHASE HQ II	7.95
CHESS CHAMPION 2175	15.75
CHUCK YEAGER 2	8.95
CIVILIZATION (1MB)	24.95
CJ IN THE USA	6.96
COMBAT AIR PATROL	21.95
CONQUEROR	6.96
CONTINENTAL CIRCUS	7.95
COOL CROC TWINS	18.95
COOL WORLD	18.95
COUNT DUCKULA	6.96
COUNT DUCKULA 2	4.95
CRAZY CARS 1	6.96
CREATURES	18.95
CROSSBOW - THE LEGEND OF TELL	6.96
CRUISE FOR A CORPSE	20.95
CRYSTAL KINGDOM DIZZY	15.75
CRYSTALS OF ARBOREA	7.95
CYBERSPACE (1MB)	24.95
D-DAY	21.95
DALEK ATTACK	13.95
DEMON BLUE	6.96
DICK TRACY	7.95
DIE HARD 2	18.95
DIZZY COLLECTION	18.75
DIZZY PANIC	6.96
DIZZY'S EXCELLENT ADVENTURES	18.75
DOC CROCS OUTRAGEOUS ADVENTURES	6.96
DOG FIGHT	24.95
DOODLEBUG	18.95
DOUBLE DRAGON III	18.95
DRAGON NINJA	6.96
DREADNOUGHTS	25.99
DREADNOUGHTS - BISMARCK	12.95
DREAMLLANDS	21.95
DRILLER	6.96
DUNGEON MASTER/CHAOS STRIKES BACK	21.95
DYNA BLASTER (1MB)	22.95
ELITE II - FRONTIER	21.95
ELVIRA - ARCADE GAME	18.95
EPIC	21.95
ESCAPE FROM PLANET OF ROBOT MONSTERS	6.96
ESPANA - THE GAMES '92	21.95
EUROPEAN CHAMPIONS	18.95
F-16 COMBAT PILOT	7.95
F-19 STEALTH FIGHTER	13.95
FACE OFF - ICE HOCKEY	7.95
FALCON	7.95
FALCON - COUNTERSTRIKE DATA DISK	7.95
FALCON - FIREFIGHT DATA DISK	7.95
FALLEN ANGEL	6.96
FANTASTIC WORLDS (COMP)	25.99
FANTASY WORLD DIZZY	6.96
FINAL BLOW	18.95
FINAL FIGHT	7.95
FIRE AND BRIMSTONE	7.95
FIRE AND ICE	18.95
FIRE FORCE	17.95
FIRE HAWK	15.75
FIRST DIVISION MANAGER	6.96
FLIGHT OF THE INTRUDER	12.95
FLIMBO'S QUEST	7.95
FOOTBALL CRAZY (COMP)	18.95
FOOTBALL DIRECTOR 2	7.95
FOOTBALL MANAGER 3	18.95
FORGOTTEN WORLDS	4.95
FORMULA 1 GRAND PRIX	24.95
FUTURE WARS	10.95
GAUNTLET II	6.96
GHOULS 'N' GHOSTS	6.96
GILBERT	6.96
GO FOR GOLD	7.95
GOAL	22.95
GOBLIINS	18.95
GOBLIINS 2	21.95
GODFATHER	22.95
GODS	18.95
GOLDEN AXE	7.95
GRAHAM GOOCH WLD CLASS CRICKET (1MB)	21.95
GRAHAM TAYLOR'S SOCCER	7.95
GUNSHIP 2000	24.95
GUY SPY	21.95
HARD DRIVIN' 2	7.95
HARD NOVA	7.95
HARDBALL	7.95
HARRIER ASSAULT (1MB)	24.95
HEAD OVER HEELS	6.96
HEIMDALL	24.95
HEROQUEST - TWIN PACK	21.95
HIGH STEEL	6.96
HILL STREET BLUES	7.95
HOME ACCOUNTS 2	41.95
HOOK	7.95
HOT RUBBER	7.95
HUCKLEBERRY HOUND	7.95
HUDSON HAWK	18.95
HUMANS	21.95
IMPOSSIBLE MISSION 2	6.96
INDIANA JONES & L. CRUSADE (ACT)	6.96
INDIANA JONES & L. CRUSADE (ADV)	12.95
INTELLIGENT STRATEGY GAMES 5	18.95
INTERNATIONAL RUGBY CHALLENGE	18.95
INTERNATIONAL SOCCER CHALLENGE	7.95
INTERNATIONAL SPORTS CHALLENGE	21.95
ISHAR 2	21.95
ITALY 1990	6.96
JAMES POND	6.96
JAWS	6.96
JOE & MAC - CAVEMAN NINJA	18.95
K-DATA	35.99
KIDS PACK	7.95
KNIGHTS OF THE SKY (1MB)	18.95

HUNDREDS MORE TITLES IN STOCK



REMEMBER!

- All prices include VAT & UK delivery
- NO credit card surcharges
- We NEVER charge credit cards until the goods are despatched

KWIK SNAX	6.96
LAST NINJA III	7.95
LED STORM	6.96
LEEDS UNITED CHAMPIONS	18.95
LEGENDS OF VALOUR	29.95
LEMMINGS (ORIGINAL)	18.95
LEMMINGS 2 (1MB)	21.95
LEMMINGS DOUBLE PACK	21.95
LEMMINGS LEVELS (STAND ALONE)	10.95
LEONARDO	1.00
LETHAL WEAPON (1MB)	18.95
LOMBARD RAC RALLY	6.96
LOOM	12.95
LOTUS ESPRIT TURBO CHALLENGE	7.95
LOTUS III - THE ULTIMATE CHALLENGE	18.95
LOTUS TURBO CHALLENGE II	7.95
LURE OF THE TEMPTRESS (1MB)	22.95
M1 TANK PLATOON	12.95
MAGIC BOY	18.95
MAGIC STORYBOOK	21.95
MAGICLAND DIZZY	6.96
MANCHESTER UNITED	7.95
MANIAC MANSION	10.95
MAX (COMP)	21.95
MCDONALD LAND	18.95
MEGA SPORTS	18.95
MEGA TWINS	7.95
MEGA-LO-MANIA / FIRST SAMURAI	22.95
MERCS	7.95
METAL MUTANT	7.95
MICKEY'S RUNAWAY ZOO	18.95
MICROPROSE GOLF	24.95
MICROPROSE SOCCER	6.96
MIDNIGHT RESISTANCE	6.96
MIDWINTER	10.95
MIDWINTER II (1MB)	13.95
MIG 29 FULCRUM (1MB)	10.95
MIG 29M SUPER FULCRUM	29.95
MOONSTONE	21.95
MOONWALKER	6.96
MOTORHEAD	12.95
MURDER	7.95
MYTH	18.95
NAVY MOVES	6.96
NEW ZEALAND STORY	6.96
NICKY 2	18.95
NIGEL MANSELL'S WLD CHAMPIONSHIP (1MB)	21.95
NIGHT SHIFT	10.95
NINJA COLLECTION	15.75
NINJA REMIX	7.95
NODDYS PLAYTIME	18.75
NORTH & SOUTH	6.96
ONE STEP BEYOND	15.75
OPERATION HARRIER	7.95
OPERATION STEALTH	12.95
ORIENTAL GAMES	7.95
OUTRUN EUROPA	7.95
PACIFIC ISLANDS	21.95
PAINT POT 2	15.75
PANG	6.96
PANZA KICK BOXING	7.95
PARASOL STARS	18.95
PICTIONARY	6.96
PINBALL MAGIC	7.95
PIRATES	10.95
PIT FIGHTER	6.96
PIXIE & DIXIE	7.95
PLAN 9 FROM OUTER SPACE	24.95
PLATINUM (COMP)	18.95
PLATOON	6.96
PLAYDAYS	18.75
POOL OF RADIANCE	22.95
POPEYE 2	6.96
POPEYE 3	7.95
POPULOUS II (1 MEG)	21.95
POPULOUS/PROMISED LANDS	10.95
POSTMAN PAT	6.96
POSTMAN PAT 3	6.96
POWERMONGER DATA DISK (WW1)	12.95
PREDATOR 1 (NOT STE)	6.96
PREHISTORIK	7.95
PREMIER MANAGER	18.95
PRINCE OF PERSIA (NOT STE)	6.96
PRINCE OF THE YOLKFOLK	6.96
PRO TENNIS TOUR 1	6.96
PSYCHO'S SOCCER SELECTION	22.95
PUSH-OVER	18.95
QUEST FOR ADVENTURE (COMP)	24.95
R.B.I. BASEBALL 2	6.96
RAGNAROK	29.95
RAINBOW COLLECTION	15.75
RAINBOW ISLANDS	6.96
RAMBO III	6.96
RAMPART	18.95
REACH FOR THE SKIES	22.95
REALMS	21.95
RICK DANGEROUS I	6.96
RICK DANGEROUS II	7.95
RISKY WOODS	18.95
ROADBLASTERS	6.96
ROBIN HOOD (1MB)	10.95
ROBIN HOOD - LEGEND QUEST	6.96
ROBINSON'S REQUIEM	21.95
ROBOCOD	7.95
ROBOCOP I	6.96
ROBOCOP II	6.96
ROBOCOP III	18.95
RODLAND	7.95
RUGBY COACH	7.95
RVF HONDA	7.95
SABRE TEAM (1MB)	18.95
SAMURAI - WAY OF THE WARRIOR	17.95
SAVAGE	7.95
SCRABBLE	20.95
SENSIBLE SOCCER 92/93	18.95
SEYMOUR GOES TO HOLLYWOOD	6.96
SHADOW SORCEROR	16.96
SHADOWLANDS	21.95
SHADOWORLDS (1MB)	18.95
SHOOT 'EM UP CONSTRUCTION KIT	7.95
SHOPPING BASKET	15.75
SILENT SERVICE II (1MB)	21.95
SIM CITY - TERRAIN EDITOR	7.95
SIM CITY/POPULOUS	21.95
SIMPSONS	7.95
SIMPSONS : BART VS THE WORLD	21.95
SLEEPING GODS LIE	7.95
SLEEPWALKER	21.95
SLIGHTLY MAGIC	6.96
SLY SPY	6.96
SMASH TV	6.96
SOCCER STARS (COMP)	18.95
SOOTY & SWEEP	6.96
SOOTYS FUN WITH NUMBERS	15.75
SPACE ACE II	24.95
SPACE CRUSADE - DATA DISK	15.75
SPACE CRUSADE PLUS MISSION DISK	18.95
SPACE GUN	18.95
SPELLBOUND DIZZY	6.96
SPORTING GOLD	17.95
SPORTS BEST	18.75
STARGLIDER II	7.95
STEIGAR	6.96
STONE AGE	18.95
STORM MASTER	10.95
STRATEGY MASTERS	24.75
STREET FIGHTER	7.95
STREET FIGHTER 2 (1MB)	20.95
STRIDER	6.96
STRIDER 2	7.95
STRIKE FLEET	10.95
STRIKER	18.95
STRIKER MANAGER	7.95
STUN RUNNER	6.96
STUNT CAR RACER	6.96
SUBURBAN COMMANDO (+ FREE FILM)	18.75
SUN CROSSWORDS 1 & 2	6.96
SUN CROSSWORDS 3 & 4	6.96
SUPER ALL STARS	18.95
SUPER CAULDRON	18.95
SUPER LEAGUE MANAGER	18.95
SUPER MONACO G.P.	7.95
SUPER SEGA (COMP)	21.95
SUPERCARS II	7.95
SUPERSKI 2	7.95
SUSPICIOUS CARGO	18.95
SWITCHBLADE I	6.96
SWITCHBLADE II	7.95
SWIV	7.95
TEAM SUZUKI	6.96
TENNIS CUP 2	7.95
TERMINATOR II	6.96
TEST DRIVE II	6.96
THE GREATEST (COMP) (1MB)	24.75
THE IMMORTAL	10.95
THE MUNSTERS	6.96
THE PATRICIAN	24.75
THOMAS FUN WITH WORDS	15.75
THOMAS THE TANK ENGINE	6.96
THOMAS THE TANK ENGINE 2	10.95
TIMES CROSSWORDS 1 & 2	6.96
TIMES CROSSWORDS 3 & 4	6.96
TITAN	7.95
TOKI	7.95
TOTAL RECALL	6.96
TOYOTA CELICA	6.96
TRACKSUIT MANAGER	6.96
TRANSARCTICA	25.99
TREASURE ISLAND DIZZY	4.49
TREBLE CHAMPIONS 2	15.75
TRIPLE PACK 1 (SPORTS)	15.75
TRIPLE PACK 2 (ACTION)	15.75
TRIVIAL PURSUIT	6.96
TURRICAN	6.96
TURRICAN II	6.96
TUSKER	6.96
TWILIGHT 2000	24.95
UNTOUCHABLES	6.96
UTOPIA - TWIN PACK	21.95
VIDEO KID	7.95
VIRTUAL REALITY 1 (COMP)	21.95
VIRTUAL REALITY 2 (COMP)	18.96
VIZ	7.96
VOYAGER	6.96
VROOM	18.95
WAR IN THE GULF (1MB)	21.95
WEST EUROPEAN TOUR SCENERY DISK	14.95
WHICH? WHERE? WHAT?	15.75
WILD WHEELS	18.95
WOLFCHILD	18.95
WORKS TEAM RALLY	6.96
WORLD CLASS LEADERBOARD	7.95
WORLD CUP SOCCER	7.95
WWF EUROPEAN RAMPAGE	18.95
WWF WRESTLEMANIA	7.95
X-OUT	6.96
Z-OUT	6.96
ZAK MCKRACKEN	10.95
ZOOL	18.95

Educational

CAVE MAZE	10.95
FRACTION GOBLINS	10.95
MATHS DRAGONS	10.95
PICTURE FRACTIONS	10.95
REASONING WITH TROLLS	10.95
TIDY THE HOUSE	10.95
TIME FLIES	10.95
ANSWER BACK JUNIOR QUIZ (6-11)	16.99
ANSWER BACK SENIOR QUIZ (12-AD)	16.99
FRENCH MISTRESS	16.99
GERMAN MASTER	16.99
ITALIAN TUTOR	16.99
SPANISH TUTOR	16.99
MICRO ENGLISH (8-GCSE)	19.95
MICRO FRENCH (BEGINNERS-GCSE)	19.95
MICRO MATHS (11-GCSE)	19.95
MICRO SCIENCE (8-GCSE)	19.95
PRIMARY MATHS COURSE (3-12)	19.95
BETTER MATHS (12-16)	18.95
BETTER SPELLING (8-ADULT)	18.95
JUNIOR TYPIST (5-10)	13.95
MAGIC MATHS (4-8)	18.95
MATHS MANIA (8-12)	18.95
THE THREE BEARS (5-10)	18.95
ADI ENGLISH (11-12)	18.95
ADI ENGLISH (12-13)	18.95
ADI ENGLISH (13-14)	18.95
ADI ENGLISH (14-15)	18.95
ADI FRENCH (11-12)	18.95
ADI FRENCH (12-13)	18.95
ADI FRENCH (13-14)	18.95
ADI FRENCH (14-15)	18.95
ADI MATHS (11-12)	18.95
ADI MATHS (12-13)	18.95
ADI MATHS (14-15)	18.95
FUN SCHOOL 2 (6-8)	6.96
FUN SCHOOL 2 (OVER 8)	6.96
FUN SCHOOL 2 (UNDER 6)	6.96
FUN SCHOOL 3 (UNDER 5)	18.75
FUN SCHOOL 4 (7-11)	18.75
FUN SCHOOL 4 (UNDER 5'S)	18.75

Hint Books

INDIANA JONES & L. CRUSADE (ADV)	5.99
LOOM	7.99
MANIAC MANSION	7.99

DataGEM
has supplied computer hardware and software to tens of thousands of satisfied customers since 1987
Amiga Atari PC Sega
Trust us to have all you need

3.5" Disks



Qty	DSDD	DSHD
10	5.30	7.80
20	10.35	15.35
25	12.65	18.25
30	14.75	21.80
35	16.90	25.20
40	18.95	28.60
45	21.10	32.10
50	22.95	34.40
80	36.35	52.30
100	39.95	61.90
120	49.40	72.40
150	60.95	90.25
200	78.75	115.75
250	97.30	143.30
300	116.30	170.75
400	154.50	221.70
500	184.65	269.65
600	223.50	320.60
1000	364.30	524.40

All our disks are fully guaranteed & include labels.

Can't see what you want here? Our sales staff and computerised systems can help you–try them!

Miscellaneous

External Disk Drive	54.95
Head Cleaner (3.5")	3.75
Mouse	14.75
Mouse House	2.95
Mouse Mat	2.95
Parallel port extension cable	6.80
Parallel printer cable (2m)	6.60
Roboshift (auto Mouse/Joystick switch)	14.75
Trackball	28.75

Dust Covers

Atari	3.65
Monitor	6.99
STAR LC10 printer	7.65
STAR LC24 printer	6.99

Disk Boxes



10	Slimp	0.94
40		4.95
50		5.60
80		6.30
100		6.80
120		8.75
150		10.95

Joysticks

125+	9.00
Competition Pro 5000–black	13.75
Freewheel–digital	27.00
Maverick 1 (QS128F) or 1M (SQ138F)	13.75
Megastar A/F (SV133)	22.00
Navigator A/F	13.75
Python 1 (QS130F)	9.25
Python 1M (QS137F)	9.75
Quickjoy 1 Turbo (SV121)	7.95
Speedking A/F	11.00
Star Probe	13.50
Supercharger (SV123)	9.00
The Bug (black or green)	13.50
Topstar (SV127)	21.50

Printer Ribbons

STAR LC10/20/100 black (LC9)	4.50
STAR LC10/20/100 colour (LC9CL)	6.80
STAR LC200 black (ZX9)	6.25
STAR LC200 colour (ZX9CL)	12.30
STAR LC24 series black (Z24)	6.50
STAR LC24–200/XB–24 series colour (X24CL)	13.75

071 608 0624
Fax:071 608 0688

DataGEM Ltd
Department STR, 23 Pitfield St, London N1 6HB

Cheques and Postal Orders

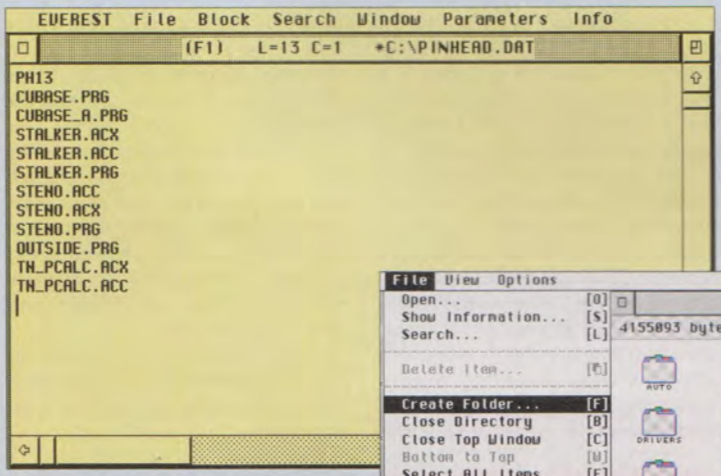
Orders against cheques with valid guarantee card numbers will be despatched immediately, otherwise upon cheque clearance.

All prices include UK postage and VAT and are effective until 8th January 1994.

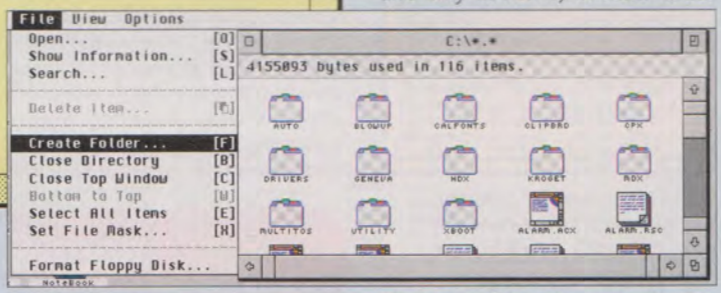
On overseas orders, postage is charged at cost. New titles will be sent as released and are subject to manufacturers' price reviews. All orders taken subject to our standard terms and conditions. E.&O.E.

TOP NOTCH

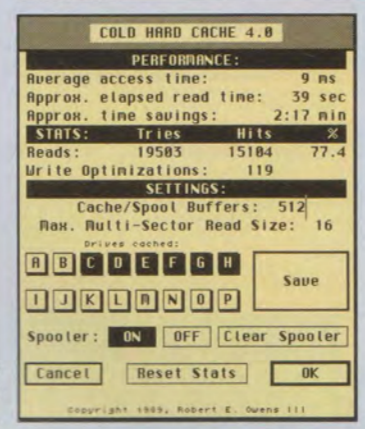
Following on from our utilities booklet last month, Ofir Gal spends the next few issues building up the perfect selection of desk accessories and auto folder programs...



PinHead can be configured using any text editor. Programs incompatible with its fast-load technique can be included in the PINHEAD.DAT file.



The Auto folder is normally found on your boot disk. If not, simply create one from the desktop.



Cold Hard Cache includes an easy-to-use configuration desk accessory.

The ST, or more precisely TOS, is capable of a limited degree of multi-tasking without the assistance of additional programs like *Geneva* or *MultiTOS*. As most of you know, you can run up to six desk accessories at the same time without much difficulty. Most accessories are "asleep" until you actually select them, but some are visibly active in the background. A typical example of an active desk accessory are the corner clocks that continuously update the time. Desk accessories are simply standard programs, capable of almost anything a GEM program can do, but have the special ability to stay resident and never quit.

There is another type of resident program, known as TSRs (Terminate and Stay Resident) or Auto folder programs. Such a program is loaded at boot time and remains active in memory until you reset the system. TOS enforces various restrictions on a TSR; it cannot display menus, windows or dialogue boxes and rarely allows for user interaction. In fact, such a program rarely displays anything except a brief copyright message when first loaded! Restrictions like these do not mean that they cannot be useful...

TWO TYPES OF AUTO PROGRAMS

While not obvious at first, there are actually two types of Auto programs. The simpler variety are "run-once" programs like *Superboot* or various time and date setters. These programs run automatically, allow you to set the time or select some options, and then terminate without remaining in the system memory.

A TSR program works in a different way. As its name suggests, it remains resident and is normally used to "patch" the system in some way. A typical example is a replacement file selector program like *UIS* or *Selectric*. Such a program sits in the system waiting for another program to call the file selector up. When it senses that this has happened, the program "wakes up" and displays the alternative file selector.

Using this technique, many programs are available to improve the performance of your system by enhancing certain features or by removing some bugs. Many of these programs are available in the public domain or as shareware and can be used to optimise your system, helping you get the best out of whichever configuration of hardware and software you use.

PINHEAD

TOS versions before 1.04 have the annoying habit of clearing the system memory whenever you load a program. This is totally unnecessary and slows down the boot process. The actual time it takes to clear the memory depends on how much RAM you have and the speed of the machine, but you can reckon on somewhere between one and two seconds per program or accessory.

JARGON JOGGER

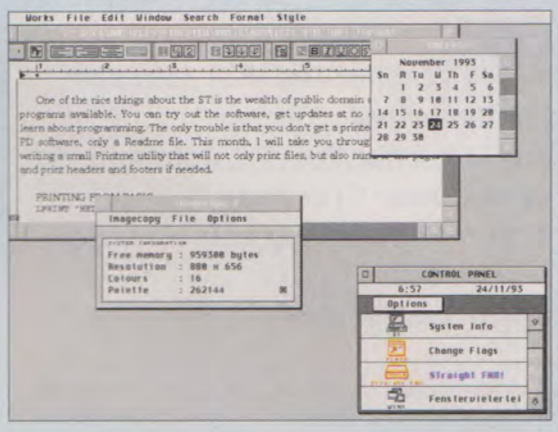
Auto folder: the folder that houses programs you want to automatically load when you boot up. Only special programs can be used for this purpose.

Cache: stores information about the position of files on a disk. By using this, a disk drive can operate more efficiently.

FAT: the File Allocation Table keeps a record of where files are positioned on disk.

Printer spooler: part of memory used to hold a file while printing so allowing you to continue working.

TSR: a Terminate and Stay Resident program runs at boot-up and then remains in memory.



The ST had a limited form of multi-tasking built-in from day one! It's possible to run several TSRs, six desk accessories and an application all at the same time.

This may not seem like much, but if you have five Auto programs and five accessories it can add up to 20 seconds! *Pinhead* works by patching TOS so that it only clears the portion of memory required for each program so speeding up the boot process.

TOS versions from 1.04 onwards incorporate this bug fix, but in the best Atari tradition the fix has only been partially implemented, causing serious problems with desk accessories. *Pinhead* works reliably with all TOS versions including *MultiTOS*.

The latest version of Pinhead is 2.1 and is very simple to install. Copy *PINHEAD.PRG* to the Auto folder and reboot. By its very nature, it's best if *Pinhead* is the first program to run. Use a program like *AutoSort* (see below) to re-order the Auto folder accordingly.

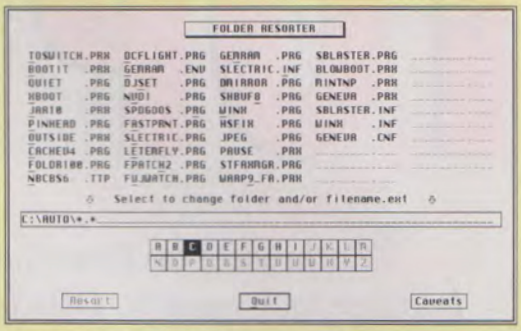
There are several programs around that don't like *Pinhead*, including *STalker* and *STeno*. *Pinhead* copes with such programs by using a configuration file. *PINHEAD.DAT* should be placed in the root directory of your boot drive. The file is a simple text file that can be created and edited using any text editor; it starts with the line "PH13" and the following lines are simply a list of all the programs and desk accessories that require a full memory clearout when they are run.

RUNNING ORDER

When viewing files in the desktop, they can appear in alphabetical order or whichever other option you choose. However, until TOS 2.00 it was impossible to view the files in their true, unsorted order. This is the way the actually appear on disk and the order in which they are run from the Auto folder on boot-up.

Some TSRs must be run before others otherwise they become confused and cause system crashes. The actual order is difficult to determine and can be a case of trial and error. *PinHead*, for example, is best run first followed by a disk cache. You should always check the documentation of each program for any special instructions.

There are various utilities that do this job and most are available as PD or shareware. *AutoSort* is well tested and works on all machines and TOS versions including the Falcon.

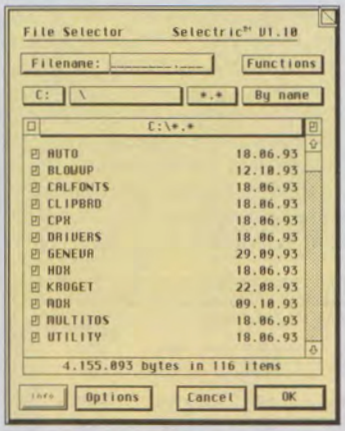


AutoSort v4.1 is the fastest and easiest way to sort an Auto folder. It's twice as fast if you have a cache installed...

DISK CACHING

The data on a floppy disk or a hard drive is stored and retrieved using a directory and a file allocation table (FAT). Every time you load a file into your word processor or save a song from your MIDI sequencer, the directory and FAT are first read before TOS knows where the file is located on disk. This causes the read/write head to travel back and forth along the disk surface, slowing down the process considerably.

A TSR can be used to store the FAT information in memory so that TOS can read this information and so not need to physically read the data from disk each time. There are several programs around to do just that and are fairly simple to install and use. Top of the list is Atari's own version, a program called *CACHEXXX.PRG*. The program is installed by renaming it, replacing the "XXX" with a value that determines the amount of memory allocated to the cache (in blocks of 1Kb – *CACHE64* would use 64Kb of RAM). After installing the program, you will feel an immediate improvement in disk access times, especially if you have a hard drive.



An alternative file selector like Selectric is an example of a TSR with a full-blown user interface.

COLD HARD CACHE

There are several reasons for using a more advanced cache program. *Cachexxx* does not work with TOS versions below 1.04 and is rather inefficient. *Cold Hard Cache* is a user-friendly cache program with many useful features including a highly compatible printer spooler.

The program is currently at version 4.00 and is available from many PD libraries. It consists of the cache program itself and a desk accessory that can be used to view and adjust the cache performance. *Cold Hard Cache* employs a "read ahead" technique that is extremely effective when handling deeply nested files on a hard drive but suffers from two major drawbacks – it is unsafe to enable caching on a floppy drive and it cannot be used on partitions larger than 16Mb. Other than that it is the fastest cache on the market.

There are many alternatives, so it's best to experiment until you find one you are happy with. Another popular cache program is *TCache* which is extremely flexible and employs various techniques to achieve effective caching with floppies and very large partitions.

It even has a write cache but has the disadvantage of requiring hefty amounts of memory to operate in...

```
PinHead 2.1
© 1989,90,91,92 Charles F. Johnson
All Rights Reserved.
Programming by Charles F. Johnson
w/ help from John Eidsvoog
Shareware from Little Green Footballs

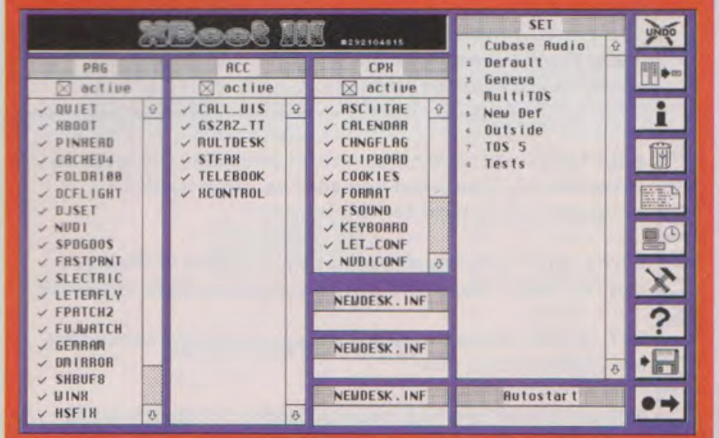
Please support shareware authors!
```

A typical TSR has no fancy dialogue boxes. All you see is a quick text message that usually disappears before you finish reading it!

BOOT MANAGERS

Even the best behaved TSRs and accessories can be incompatible with certain applications. The only way to stop them is to rename the files with a .PRX or .ACX extension and reboot. A boot manager program helps you by allowing the creation of various configurations of TSRs and accessories which can be toggled with ease at boot time.

Most boot managers are available as shareware – *SuperBoot* and *MouseBoot* are highly recommended. The only commercial alternative is the excellent *XBoot*; among its many features is the ability to reorder the files in the Auto folder at boot time.



XBoot is one the best boot managers available. It provides a GEM-like interface with pop-up menus and full use of the mouse and keyboard shortcuts.

Eagle Software



10% DISCOUNT ON ORDERS OVER £75* (EXCLUDES POSTAGE AND DISCS)

118a Palmers Road
New Southgate
LONDON N11 1SL.

CREDIT CARD HOTLINE:
081 889 9172
ENQUIRY/ORDER LINE:
081 361 5730
24 HOUR FAX LINE
081 361 2733

BITMAP BROTHERS VOL 1 only £16.99
Xenon, Cadaver and Speedball II

DREAM TEAM only £16.99
Terminator II, Simpsons, W.W.F.

RAVING MAD only £16.99
Mega twins, Rodland, Robocod

NAPOLEONICS only £16.99
Waterloo, Borodino and Austerlitz

SOCCER MANIA only £9.99
Football Manager II, Gazza's Soccer, Football Manager - W.C. Edition, Microprose Soccer

POWER PACK II only £17.99
Predator II, Battle Master, Wings, It Came From The Desert

BIG BOX only £15.99
Captain Blood, Tin Tin on the Moon, Safari Guns, Teenage Queen, Bubble Plus, Purple Saturn Days, Krypton Egg, Jumping Jackson, BoBo, Hostages

TRIPLE PACK I (SPORTS) only £12.99
Microprose Soccer, Panza Kick Boxing and 3D Pool

BIG BOX II only £19.99
Back to the Future III, R-Type, IK+, Real Ghostbusters, Def of the Earth, TV Sports Football, Shanghai, Armalyte, Sinbad, Bombuzal

FLIGHT COMMAND only £14.99
Eliminator, Strike Force Harrier, Lancaster, Sky Fox and Sky Chase

4 WHEEL DRIVE only £19.99
Lotus Esprit, Celica GT4 Rally, Team Suzuki, and Combo Racer

POWER PACK only £14.99
Xenon 2, TV Sports Football, Bloodwych and Lombard Rally

HOLLYWOOD COLLECTION only £18.99
RoboCop, Ghostbusters 2, Indiana Jones, Batman the Movie

RAINBOW COLLECTION only £13.99
New Zealand Story, Bubble Bobble, Rainbow Islands

GRANDSTAND only £16.99
Gazza Super Soccer, Pro Tennis Tour, World Class Leaderboard and Continental Circus

MAX EXTRA only £17.99
Turrican II, ST Dragon, SWIV and Night Shift

NINJA COLLECTION only £10.99
D. Dragon, Shadow Warrior, D. Ninja

TRIPLE PACK II (ACTION) only £12.99
Streetfighter, RickDangerous II, Last Crusade Action

SUPER HEROES only £10.99
Strider II, Indiana Jones, Last Ninja II and Spy who loved me

AWARD WINNERS ONLY £16.99
Kick Off II, Pipemania, Space Ace and Populous

2 HOT 2 HANDLE only £18.99
Golden Axe, Total Recall, Shadow Warrior, Super Off Road Racing

STRATEGY MASTER only £21.99
Deuteros, Populous, Hunter, Chessplayer 2150 and Spirits of Excalibur

SUPER FIGHTER only £16.99
Pitfighter, W.W.F., Final Fight

THE GREATEST only £19.99
J.W.Whirlwind Snooker, Lure of the Temptress and Shuttle

DIZZYS EXCELLENT ADVENTURES only £14.99
Dizzy Panic, Bubble Dizzy, Dizzy Prince of Yolk Folk, Spellbound Dizzy and Kwik Snak

ACTION MASTERS only £9.99
Turbo Outrun, F16 Combat Pilot, Italy 1990, Welltris and Double Dragon II

SPORTS COLLECTION only £9.99
Run the Gauntlet, Pro Tennis Tour and World Cup Soccer (Italia '90)

FOOTBALL CRAZY only £16.99
Kick Off II, Player Manager and K.O.II Final Whistle

QUEST AND GLORY only £16.99
Cadaver, Bloodwych, Iron Lord and Midwinter

ACTION 5 only £19.99
Rick Dangerous II, Ghostbusters II, Gunship, Super Ski and Hard Driving

TOP TITLES	ST
3D Construction Kit	£12.99
3D Construction Kit II	£36.99
A320 Airbus Europe	£23.99
A320 Airbus USA	£23.99
Action Stations	£12.99
Agony	£15.99
Air Combat Patrol	£19.99
Air Support	£15.99
Aliens III *	£16.99
A.Maclean's Pool	£16.99
AMNIOS	£15.99
Ancient Art of War in Skies	£23.99
Another World	£17.99
Aquatic Games star J Pond	£16.99
Arabian Nights *	£16.99
Armourgeddon	£15.99
Armourgeddon Upgrade *	£10.99
A.T.A.C. *	£23.99
A-Train *	£17.99
Awsome	£8.99
B17 Flying Fortress	£23.99
Barbarian II (Psyg)	£9.99
Bart vs The World *	£16.99
B.A.T. II	£22.99
Batman Returns *	£16.99
Battle Command	£10.99
Battle Isle	£18.99
Battle Toads	£16.99
BC Kid	£16.99
Body Blows *	£16.99
Buck Rogers	£19.99
Burn Up *	£16.99
Caesar	£16.99
Cadaver - the pay off	£10.99
California Games II	£7.99
Campaign	£22.99
Campaign Mission	£10.99
Campaign II *	£23.99
Captive	£12.99
Captive II *	£17.99
Carl Lewis Challenge	£15.99
Castles	£16.99
Castles Data Disc	£11.99
Championship Manager	£16.99
Championship Manager '93	£16.99
Chaos Engine	£16.99
Chase HQ II	£14.99
Chuck Rock II *	£16.99
Civilisation	£23.99
C.V's Air Combat	£20.99
Cool Croc Twins	£16.99
Cool World	£16.99
Combat Air Patrol	£18.99
Covert Action	£23.99
Crazy Cars III	£16.99
Cruise for a Corpse	£17.99
Crystal Kingdom Dizzy	£13.99
Cyberspace *	£23.99
D-Day	£20.99
Dalek Attack	£12.99
Darkmere	£16.99
Deliverance	£15.99
D/Generation	£11.99
Disciples of Steel	£17.99
Doodlebug	£12.99
Double Dragon III	£16.99
Dreadnoughts	£22.99
Dreadnoughts Bismark	£11.99
Dreadnoughts Ironclad	£11.99
Duck Tales Quest for Gold	£15.99

TOP TITLES	ST
Dune *	£19.99
Dune II *	£19.99
Dungeon / Chaos	£19.99
Dyna Blast	£20.99
Elf	£12.99
Elvira Mistress Dark	£21.99
Elvira II - Cerberus	£23.99
Epic	£19.99
F14 Tom Cat *	£18.99
F15 Strike Eagle II	£12.99
F117A Stealth Fighter *	£21.99
F19 Stealth Fighter	£12.99
F29 Retaliator	£8.99
F.A Premier Lgue Football	£16.99
Face Off - Ice Hockey	£8.99
Falcon	£9.99
Falcon Mission Disk I	£6.99
Falcon Mission Disk II	£6.99
Falcon 3.0 *	£23.99
Fantastic Voyage	£16.99
Fate of Atlantis (Arc)	£16.99
Final Blow	£16.99
Final Fight	£7.99
Fire and Ice	£15.99
First Samurai	£7.99
First Samu/MegaLoMan	£20.99
Flashback *	£16.99
Flight of the Intruder	£11.99
Football Manager III *	£16.99
Future Wars	£8.99
Gauntlet III	£12.99
Getysburg	£15.99
Global Effect	£16.99
Global Gladiators	£16.99
Goblins II	£19.99
Gods	£14.99
Golden Shot	£16.99
G. Gooch Cricket (1 Meg)	£19.99
Graham Taylor	£15.99
Grand Prix (Formula)	£16.99
Gunship 2000 *	£23.99
Guy Spy	£17.99
Hard Nova	£7.99
Harlequin	£14.99
Harrier Assault AV8B	£23.99
Heimdall	£19.99
Hero's Quest (Grem)	£8.99
Hill Street Blues	£8.99
Historyline 1914-18 *	£16.99
Hook	£8.99
I. Bothams Cricket	£19.99
International Open Golf	£16.99
International Sports Chall	£15.99
Ishar - Legend Fortress	£20.99
Jaguar XJ220 *	£16.99
James Pond III (Op Starfish)*	£16.99
J. White's Whirlwind	£19.99
J. Barnes (1 Meg)	£15.99
KGB	£20.99
Kick Off II (1 Meg)	£10.99
Kid Gloves II	£16.99
KILLING GAME SHOW	£15.99
Knight Mare	£8.99
Knight of the Sky	£23.99
Krusky's S.Funhouse *	£16.99
Lawn Mower Man *	£16.99
Leander	£15.99
Leathal Weapon	£16.99
Leeds Utd	£16.99
Legend	£8.99

TOP TITLES	ST
Legends of Valour	£26.99
Lemmings	£15.99
Lemmings and Data Disk	£19.99
Lemmings II	£19.99
Lemmings - Data Disk	£13.99
Lemmings - Stand Alone	£9.99
Liquid Kids *	£16.99
Little Devil *	£17.99
Loom	£11.99
Lost Patrol	£15.99
Lotus Turbo Challenge II	£8.99
Lotus Turbo Challenge III	£16.99
Lure of the Temptress	£19.99
M1 Tank Platoon	£9.99
MacDonaldland	£9.99
Magic Pockets	£14.99
Man Utd. Europe	£8.99
M. Ditka Ultimate Football *	£18.99
Mega Fortress	£19.99
Mega Sports	£16.99
Megatraveller II	£20.99
Merchant Colony	£16.99
Microprose Golf	£16.99
Midwinter II	£12.99
Mig 29 Fulcrum	£9.99
Monkey Island	£15.99
Mr Nutz	£16.99
Nam 1965-75	£12.99
N. Mansell World Champ	£20.99
Nick Faldos Golf	£23.99
Operation Stealth	£9.99
O.Sharif Bridge	£20.99
OBITUS	£10.99
Ork	£10.99
Outlander	£16.99
Pacific Islands - T.Yankee II	£20.99
Pacific Islands Mission Disc *	£14.99
Pacific Islands II *	£20.99
Parasol Stars	£8.99
Plan 9 From Outer Space	£8.99
Populous + Promised Lands	£9.99
Populous II (1 Meg)	£20.99
Populous II (Half Meg)	£20.99
Premier Manager	£16.99
Premier Manager II	£16.99
Pro Flight	£30.99
Push Over	£8.99
Putty *	£16.99
Ragnorok *	£16.99
Railroad Tycoon	£16.99
Reach for the Skies	£18.99
Red Zone	£15.99
Risky Woods	£16.99
Road Rash	£16.99
Robin Hood	£16.99
Robocod	£7.99
Robocop III	£8.99
Rod Land	£12.99
Rookies *	£17.99
R-Type II	£14.99
Sabre Team	£16.99
Secret Weap Luft *	£19.99
Sensible Soccer 92-93	£16.99
Shadowlands	£20.99
SHADOW BEAST II	£8.99
Shadow Worlds	£16.99
Shoot em up Con. Kit	£7.99
Shuttle the Sim	£20.99
Silent Service II	£16.99
Sim Earth	£23.99

TOP TITLES	ST
Simpsons	£6.99
Sleepwalker (1 Meg) STE	£13.99
Snow Bros	£16.99
Soccer Kid	£16.99
Space 1889	£18.99
Space Gulf	£12.99
Space Crusade	£16.99
Special Forces	£23.99
Steel Empire	£20.99
Stereo Master	£26.99
Street Fighter II	£17.99
Strike Fleet	£9.99
Striker	£16.99
Soup Trek *	£16.99
Super Cauldron	£16.99
Super Space Invaders	£8.99
Super SWIV *	£16.99
The Games '92 Espana	£20.99
Their Finest Hour	£19.99
The Manager	£20.99
ThunderhawkAH-73M	£16.99
Thunder Jaws	£16.99
Tip Off	£16.99
Toonworld *	£16.99
Tornado *	£23.99
Trodders *	£16.99
Trolls	£16.99
Twilight 2000 *	£23.99
Ultima V	£19.99
Ultima VI	£20.99
UMS II	£23.99

TOP TITLES	ST
Universal Monsters	£16.99
Utopia	£16.99
Utopia New World	£11.99
Utopia II *	£16.99
Video Kid	£15.99
Viking Fields of Conquest	£15.99
Volfied	£16.99
Vroom	£16.99
Walker	£18.99
War in the Gulf	£19.99
War Zone (Core Design)	£12.99
White Death (1 Meg)	£12.99
Wild Wheels	£14.99
Wiz Kid	£15.99
W.W.F.	£6.99
W.W.F. II	£8.99
Zool *	£16.99

3.5 DS DD discs
with Labels boxed in 10's

10 x 3.5	DS	DD	£5.99
20 x 3.5	DS	DD	£11.99
30 x 3.5	DS	DD	£15.99
50 x 3.5	DS	DD	£21.99
100 x 3.5	DS	DD	£39.99

Please add 50p per 10 discs when ordering to cover P & P

Also available:
DS HD disks please phone for prices

EDUCATIONAL	
ADI English 11-12	£16.99
ADI English 12-13	£16.99
ADI English 13-14	£16.99
ADI French11-12	£16.99
ADI French 12-13	£16.99
ADI French 13-14	£16.99
ADI Maths11-12	£16.99
ADI Maths 12-13	£16.99
ADI Maths 13-14	£16.99
Better Spelling 8-14	£14.99
Better Maths 12-16	£14.99
Paint and Create	£16.99
Spelling Fair	£16.99
Merlins Maths	£16.99
Fun School 3 under 5	£13.99
Fun School 3 5-7	£13.99
Fun School 3 7+	£13.99
Fun School 4 under 5	£16.99
Fun School 4 5-7	£16.99
Fun School 4 7+	£16.99
Junior Typist	£11.99
Magic Maths (4-8)	£14.99
Maths Mania	£14.99
Noddy's Playtime	£16.99
The Three Bears	£14.99

SPECIAL OFFER
BUY 4 budget titles and get the 5th one FREE!

ST BUDGET TITLES UNDER £10

3D Pool	£6.99
Addams Family	£7.99
Afterburner	£6.99
Altered Beast	£6.99
Arkanoid II	£6.99
ATOMINO	£5.99
Barbarian	£5.99
Barbarian II	£6.99
Batman The Movie	£6.99
Battlehawks 1942	£9.99
Blood Money	£6.99
Bully's Sporting Darts	£7.99
Cabal	£6.99
California Games	£6.99
Carrier Command	£8.99
Celica GT4 Rally	£6.99
Centrefold Squares	£6.99
Chase HQ	£6.99
Cloud Kingdom	£6.99
Colossus Chess	£6.99
Combo Racer	£6.99
Continental Circus	£5.99
Deluxe Strip Poker	£6.99
Double Dragon I or II	£6.99
Dragon Ninja	£6.99
Duel	£6.99
Fantasy World Dizzy	£5.99
F16 Combat Pilot	£7.99
F.O.F.T.	£6.99
Gauntlet II	£6.99
Ghostbusters II	£6.99
Ghouls'n'Ghosts	£6.99
Golden Axe	£6.99
Head over Heels	£6.99
H. H. Guide to Galaxy	£7.99
Hudson Hawk	£6.99

Hunter Killer	£2.99
IK+	£6.99
Impossible Mission II	£6.99
Indy Last Crusade Graphic	£9.99
James Pond	£6.99
J.Khan Squash	£6.99
Kid Gloves	£5.99
Last Ninja II	£6.99
Last Ninja III	£7.99
Little Computer People	£2.99
Lombard RAC Rally	£6.99
Lotus Esprit	£6.99
M. Jackson Moonwalker	£6.99
Midnight Resistance	£6.99
Midwinter	£9.99
Moonshine Racers	£6.99
Mouse (Switchable)	£9.99
Murder	£7.99
Navy Seals	£9.99
New Zealand Story	£6.99
North & South	£6.99
Out Run	£6.99
Operation Stealth	£9.99
Operation Thunderbolt	£6.99
Operation Wolf	£6.99
Outrun Europa	£7.99
Pang	£6.99
Panza Kick boxing	£8.99
Pinball Magic	£7.99
Pirates	£8.99
Pitfighter	£6.99
Platoon	£5.99
Plotting	£6.99
Predator	£6.99
Predator II	£9.99
Prince of Persia	£6.99

Pro Tennis Tour	£6.99
Puzznic	£6.99
Rainbow Islands	£6.99
Rambo III	£6.99
RBI2 Baseball	£6.99
Resolution 101	£6.99
Rick Dangerous II	£7.99
Robocop	£6.99
Robocop II	£6.99
Rolling Ronny	£9.99
R-Type	£6.99
Run The Gauntlet	£6.99
R.V.F. Honda	£6.99
Shadow of the Beast	£6.99
Shadow Warrior	£6.99
Sherman M4	£6.99
Shinobi	£6.99
Smash TV	£6.99
Stunt Car Racer	£6.99
Supaplex	£6.99
Super Cars II	£8.99
Super Off Road	£8.99
Super Hang On	£6.99
SwitchBlade	£6.99
Switch Blade II	£8.99
Swiv	£6.99
Teenage Mutant Turtles	£6.99
Tennis Cupp II	£7.99
Terminator II	£6.99
Thunderstrike	£6.99
Toki	£7.99
Toobin'	£6.99
Turrican II	£7.99
Untouchables	£6.99
Vigilante	£6.99
WC Leaderboard	£6.99
World Championship Boxing	£6.99
Zak McKracken	£8.99

VISIT OUR SHOP
AT
120a
MYDDLETON ROAD
WOOD GREEN
LONDON
N22 4NQ.
081 889 9172
SHOP PRICES MAY VARY.

Please make cheques and P.O.'s payable to *Eagle Software*. P&P is £1.00 per item in the UK. Europe: add £3.50 per item. Elsewhere add £5.50 per item. New titles will be sent as released and are subject to manufacturers price reviews. E.&O.E. PLEASE SEND ME MY FREE COPY OF 'THE REVIEW BOOKLET'. ☐ * Please quote special offer when ordering for it to apply.

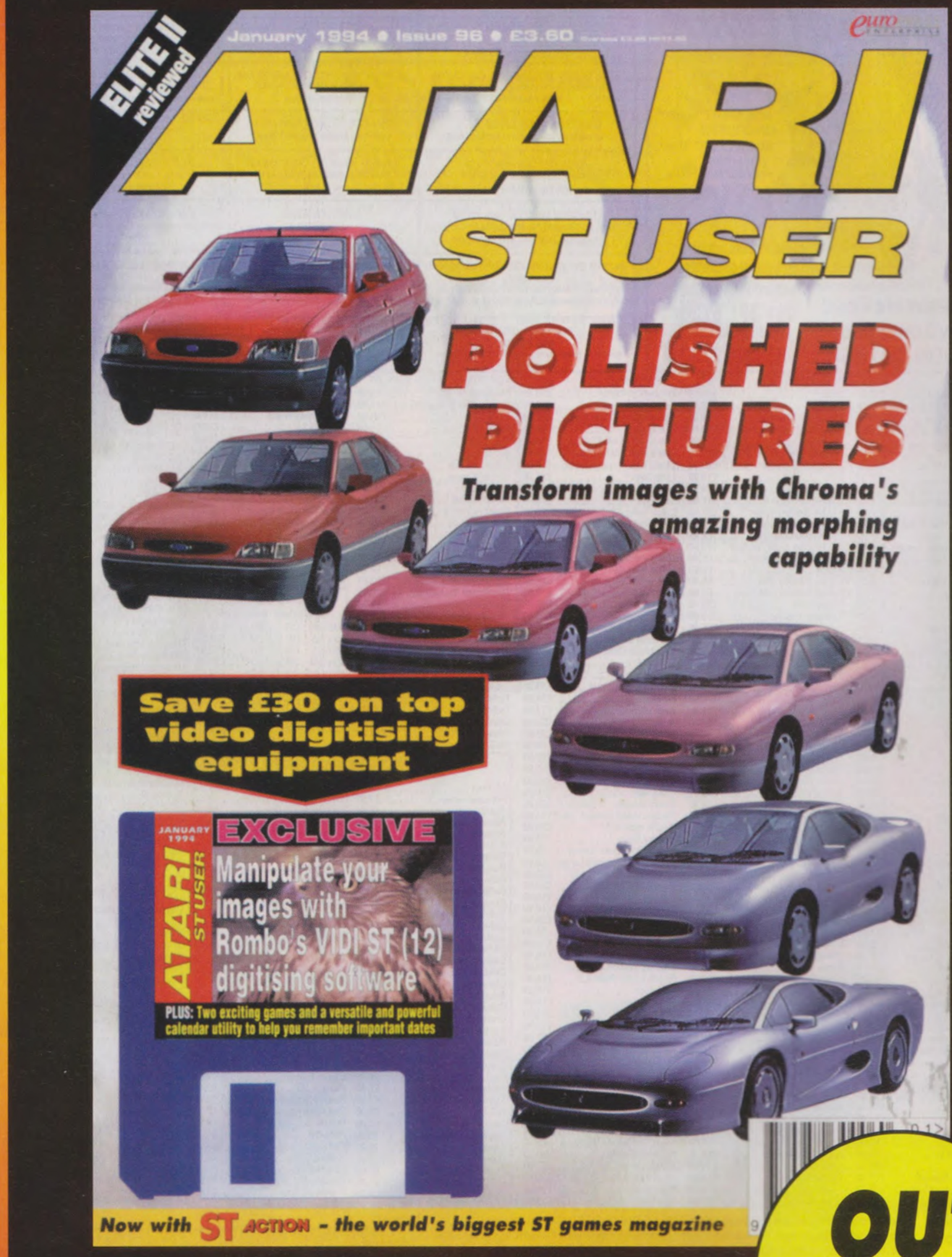
Computer _____ ATARI ST _____ Date _____
Title _____ Price _____
_____ Price _____
_____ Price _____
_____ Price _____
P & P _____
Total _____

226
*Not released at time of going to press.

VISA Access

Name: _____
Address: _____
_____
_____
Postcode: _____ Tel: _____
Card No: _____
Exp Date _____ Account No: _____
Access ☐ Visa ☐ Cheque ☐ P.O's ☐

Free Membership with First Order. No obligation to re-order.


ELITE II reviewed
January 1994 • Issue 96 • £3.60
ATARI ST USER
POLISHED PICTURES
Transform images with Chroma's amazing morphing capability
Save £30 on top video digitising equipment
JANUARY 1994
ATARI ST USER
EXCLUSIVE
Manipulate your images with Rombo's VIDI ST (12) digitising software
PLUS: Two exciting games and a versatile and powerful calendar utility to help you remember important dates
Now with ST ACTION - the world's biggest ST games magazine

OUT NOW!

SLIDIN' HOME...

In the last of our EasyBase tutorials, Joe Connor unearths some less than obvious text editor features...

An integrated text editor makes it simple to use *EasyBase* to create and edit records, masks and reports. After learning to use the editor it makes sense to use it for other text-related tasks on your system. With *EasyBase* installed as a desktop accessory not only do you have access to your data but you can also read on-disk documentation, make notes, edit files and type simple letters.

If you're lucky enough to be running a screen resolution above ST High (640 by 400 pixels), the resize icon at the bottom right hand corner of the main *EasyBase* screen can be used to increase the size of both the main screen and the editor window.

Although there are several commands that open the editor, the best way is to select the **Edit report form** option from the **F3 Report form** icon because this command doesn't interact with the database and opens the editor directly in word processing mode. Once inside the editor you can treat it like any other stand-alone application.

The icons across the bottom of the screen and the Help screen were covered briefly in the first tutorial so let's load in a text file and explore some of the nicer features the editor has to offer. Press <Control>+<L> to call the custom File selector as in figure 1 and select a text file to work on.

In addition to the usual file selector functions, some extra features are tucked out of sight under the "Info" button. Try holding down the <Shift> key to highlight a selection of files and folders, click on the "Info" button and you should see a display similar to figure 2. A further click on the "FREE/ALLOC'D" button displays the free and used space details for the selected disk or partition.

EDITOR FEATURES

Most of the editor's word processing features are controlled using the "text options" dialogue box shown in figure 3. Press <Shift>+<Control>+ to display the dialog – this option isn't shown in the Help screen!

Turn "Word wrap" on if you would prefer to let *EasyBase* automatically add carriage returns, where necessary, according to the "New line length" setting. Most people prefer word wrap mode because you can forget the <Return> key and let the program take care of line formatting.

The "Block just." option formats text to fit exactly between the margins by adding extra space characters between words.

The effect of justification is shown in figure 4 where the last paragraph has been justified to align the right margin.

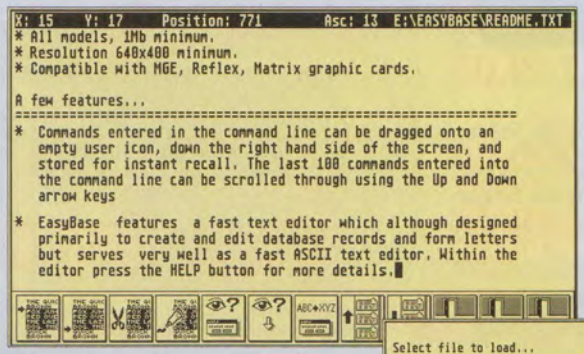


Figure 1: EasyBase's text editor.



Figure 2: The EasyBase file selector doubles up as an "I spy" utility.

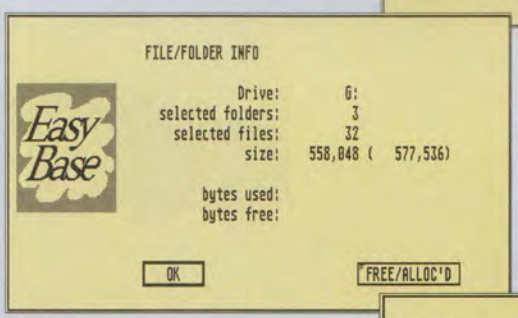


Figure 3: The "Info" display includes both the theoretical and actual disk space occupied (in brackets).

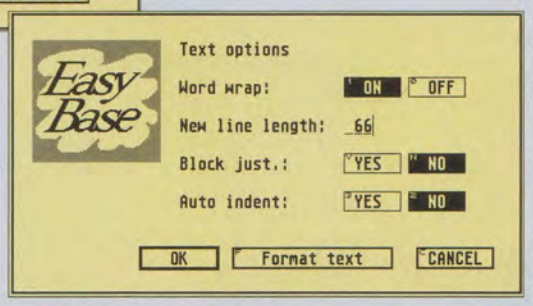


Figure 4: This important dialogue box isn't mentioned in the Help screen!

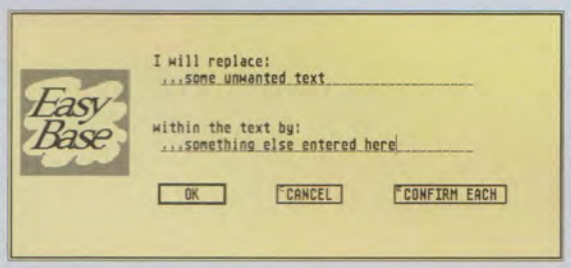


Figure 5: The editor certainly gets the job done – but the chatty dialogue boxes can be a bit much!

You can format the entire content of the editor at any time using the "Format text" button. Individual paragraphs can be formatted using another two commands not listed in the help screen. Use <Control>+<W> for justified text and <Control>+<Z> for left aligned text.

Across the top of the editor, a status line displays the current path and filename along with details concerning the current cursor location. "X" and "Y" indicate the column and line, "Position" keeps track of the number of characters from the start of the text and "Asc" displays the ASCII code for the character under the cursor. The ASCII code can be useful when trying to identify invisible formatting characters such as the ASCII code 13 carriage return character shown under the cursor in figure 1.

USING THE MOUSE

Although most editor functions are accessed through keyboard commands, the mouse provides the fastest method to mark a block of text. Simply click and drag the left mouse button over the desired text to mark it. If the mouse reaches the edge of the editor window, the text automatically scrolls in that direction. A right mouse click cuts the marked block to the paste buffer and the following right mouse click pastes the block, at the current cursor position, back into the text again.

Other features you might expect to find in a word processor are provided such as search and replace (fig 5) and tab handling, but font handling and spell checking are left to dedicated word processing applications!

QUALITY AT THE R

OUR NEW SHOWROOM IS NOW OPEN:
126 Fore Street, Upper Edmonton, London N18 2AX.
Telephone: 081-345 6000

SCANNER

Newcomers who like to scan detailed graphics or complicated images experience with the ALFADATA a favourable alternative to typing or re-scaling and investing a lot of time. Advanced users who insist on the efficient character recognition and comfortable graphic software. Choose between ALFADATA Plus or ALFADATA Plus OCR.



ALFADATA PLUS
£119.00
ALFADATA OCR
£149.00

Colour Scanner for the Falcon
£399.00
Mono Scanner for the Falcon
£99.00

SOFTWARE

WORD PROCESSORS

Wordwriter	£45.00
1st Word Plus V3.2	£39.95
Calligrapher Pro	£73.95
Calligrapher Gold	£104.95

DTP SOFTWARE

Calamus 1.09N	£95.00
Pagestream V2.2	£149.00
Calamus 5	£325.00
Timeworks Publisher 2	£55.95
Calamus SL	£545.00
OCR Software	£49.95
Touch Up (upgrade)	£27.00
Easydraw (supercharged)	£29.95
Cyber Studio	£19.00
Cyber Control	£5.00
Cyber Paint	£5.00
Truepaint (for Falcon)	£32.95
Human Design Disk	£9.00
Future Design Disk	£9.00
3D Fonts 1	£9.00
Cad 3D	£9.00
Cad 3D Developers' Disk	£9.00
Neo Desk 3	£28.00
That's Funface	£9.00
Signs and Banners	£15.00
Calendar + Stationery	£15.00
Greeting Cards	£15.00

MUSIC SOFTWARE

EMAGIC ...we make computers groove.

Emagic Notator SL	£279.00
Emagic Creator	£179.00
Emagic Unitor 2	£230.00
Cubeat	£150.00
Cubase Version 3	£319.00
Cubase Light	£70.00
Notator Alpha	£170.00
Cubase Audio	P.O.A.

ACCESSORIES

Mono-Colour Monitor Switchbox	£14.95
Multi-sync Switchbox	£29.95
Printer Cable	£6.00
Modem Cable	£6.00
Null Modem Cable	£6.00
Serial Cable	£6.00
Philips/Atari Cable	£10.00
Scart Cable	£10.00
5.25" External Drive	£29.00
3.5" External Drive	£50.00
3.5" 1.44Mb External Disk Drive for Atari/Mega STE/TT	£99.00
Blitz Turbo	£25.00
Ripper Cartridge	£25.00
Power Cable (kettle lead)	£6.00
Mouse Pad (picture)	£5.00
Blank Disk (branded)	£4.49
Spike Protectors	£30.00
Dust Covers (all sorts)	£6.00
Soldering Irons	£10.00
SCSI II Cable	£34.95
Hard Drive Fans	£5.00
Midi Cables	£10.00
D.M.A. Cable	£6.00
SCSI Cable	£6.00
SCSI Splitter Cable	£9.99
Optical Mouse Pad	£10.00
Printer Ribbons (all sorts)	P.O.A.
Toner Cartridge (all sorts)	P.O.A.
Disk Box (40 capacity)	£4.95
Atari to TV cable	£10.00
Printer Switchbox	£9.95
Auto Printer Switchbox	£14.95

ICD

ICD HOST (SCSI) ADAPTORS

AD SCSI ST	P.O.A.
AD SCSI plus ST	P.O.A.
The Link	P.O.A.
ICD Utility Disk + Manual	£24.95
Clean Up ST	£14.95

All prices are inclusive of VAT.
Products advertised represent a small sample of our in-stock range.

ATARI FALCON 030

A 16MHz 32 bit computer for fast processing, it comes with a 1.44Mb floppy drive, with built-in speaker.

Falcon 030 [illegible]Mb	POA
Falcon 030 [illegible]Mb	POA
Falcon 030 4Mb + 85Mb Hard Drive	POA
Falcon 030 14Mb + [illegible]Mb Hard Drive	POA
Falcon 030 4Mb + 120Mb Hard Drive	POA
Falcon 030 4Mb + 210Mb Hard Drive	POA

UK BEST - PLEASE CALL

Falcon Eagle Sonic 32 (32MHz) Accelerator for Atari Falcon 030 £199

FALCON MONITORS

Hi-Res mono monitor for Falcon 030	£99.00
SVGA colour for Falcon 030 .28 dot pitch	£239.00

Includes adaptor cables from Falcon to the monitors.

FOLD-A-FAXMODEM AFM-9624P



- Foldable: Can be turned up and down within a 180-degree arc
- Space-saver: Occupies only 5cm of rear space
- Maximum Safety: Prevents accidental bumping that may lead to disconnection and eventual damage

Fax/Modem only	£129.00
Fax/Modem with straight fax software	£179.00

SCSI BARE HARD DRIVE

20Mb	£55.00
40Mb	£99.00
52Mb	£199.00
85Mb	£229.00
127Mb	£279.00
170Mb	£299.00
240Mb	£399.00

BITS AND PIECES

Internal Power Supply for Atari (ST/STF/STFM/STE)	£32.95
Atari Internal Disk Drive	£45.00
Keyboard Atari STFM-STE	£59.00
STE Motherboard No RAM	£99.00
D.M.A. Chip	P.O.A.
TOS 2.06 STE/STFM	P.O.A.
1/2Mb STFM Motherboard	£69.00
Outercasing STE/STFM	£28.00
Atari Original Mouse	£8.00

FALCON 030 EXTERNAL HARD DRIVE



An economical enclosure designed to mount a single, half height, 3.5" device. Features a 40 watt power supply with a universal AC input for use throughout the world and a low noise 15C.F.M. fan to provide device cooling. Also includes the Falcon SCSI II cable.

SCSI II Casing	£129.00
40Mb + SCSI II Casing	£199.00
52Mb + SCSI II Casing	£259.00
127Mb + SCSI II Casing	£339.00
170Mb + SCSI II Casing	£369.00
240Mb + SCSI II Casing	£399.00
540Mb + SCSI II Casing	£599.00
1.2 Gigabyte + SCSI II Casing	£999.00
Floptical	£389.00

INTERNAL HARD DRIVE

High quality internal 2.5" IDE Hard drives for the Falcons, including mounting bracket and IDE cable.

40Mb	£129.00
65Mb	£169.00
85Mb	£199.00
120Mb	£249.00
240Mb	£499.00
330Mb	P.O.A.

FALCON 030 EXTRAS

SCSI II Cable	£34.95
ST Monitor Cable	£15.00
SVGA Monitor Cable	£15.00
Musicom	£43.99
Truepaint	£33.99
Cubase Audio	P.O.A.
Notator Logic	P.O.A.
400 DPI Mouse	£17.95
Microphone	£29.95
Midi Cable	£12.95
Stereo Speakers	£29.95
Stereo Headphones	£16.95

UTILITY SOFTWARE

ICD Pro Utility	£38.00
Multitos	£49.95
Speedo GDOS inc 14 fonts	£39.95
Datalite 2	£49.95
Diamond Edge	£44.95
Diamond Back 2	£34.95
Migraph OCR	£49.95
NVDI v2.5	£49.95

OFFICIAL ATARI REPAIR CENTRE

New service centre/repair for most Atari computers. We offer a quotation service of £10 for which we will examine your computer and report back with an exact quotation price for the repair, if the repair is carried out the £10 is then deducted from your bill

IGHT PRICE...

ATARI MEMORY UPGRADES

Marpet DEVELOPMENTS XTRA-RAM ST *Deluxe*

INCREASE YOUR MEMORY!

ST/STF/STFM and MEGA ST

XTRA RAM Board 0Mb	£24.95
512K to 1Mb	£29.95
1Mb to 2Mb	£65.00
2Mb to 4Mb	£120.00
8Mb for Atari ST	P.O.A.
Falcon 14Mb	£699.00
Virtual Memory	£49.00

GASTEINER STE UPGRADES

SIMM to SIPP Adaptor	£3.00
1/2Mb	£4.95
2Mb	£45.00
4Mb	£90.00

FORGET-ME-CLOCK II

Clock Cartridge for the Atari ST/STe and Falcon series

Clock Cartridge excl Thru Port	£11.99
Clock Cartridge with Thru port	£14.99

ATARI

Atari 520 STE.....1/2 Mb	£169.00
Atari 520 STE.....1Mb	£189.00
Atari 520 STE.....2Mb	£265.00
Atari 520 STE.....4Mb	£320.00
Atari 1040 STE...1Mb	£199.00
Atari 520 STFM	£149.00

MONITORS

GASTEINER DOES IT AGAIN. Sold over 5,000 units of their high resolution Atari replacement monitors

Gasteiner GM146 no speaker	£119.00
Gasteiner GM148 with speaker	P.O.A.
Gasteiner multisync monitor	£369.00
Philips 8833 MkII	£199.00
Atari SC1224 Colour	£179.00

PRINTERS

HP 510 Mono Printer	£319.00
HP 550C Colour Printer	£630.00
Seikosha IP 104 Laserprinter	£549.00
Ricoh Laserprinter	£769.00
HP Laserjet 4L	£699.00
Citizen Swift 200	£199.00
Citizen 120D	£129.00
Citizen Swift 240 Colour	£299.00

STAR BARGAIN OF THE MONTH

40Mb Hard Drive £199.95

AUTO MOUSE/ JOYSTICK SWITCH

Allows you to instantly select either your mouse or joystick by a simple click on your mouse. You won't need to fumble around under or behind your computer to swap your mouse and joystick cable ever again, and also it saves your joystick port

AT A GIVEAWAY PRICE

£9.99

ERGANOMIC DESIGN TRACKBALL SERIES



GASTEINER HARD DRIVE



Due to the massive popularity of our Gasteiner Hard Drives which we have been manufacturing for the past five years, and the demand for our cases, we are now producing a choice of cases ranging from 3.5" half height to 5.25" full height which can take a massive 1.2 Gigabyte hard drive. We also have in stock the latest in hard drive cases which enable you to have up to 8 SCSI hard drives fitted internally all in one case. Compatible with all Atari ST/STF/STFM/STE/ Mega ST/Mega STE computers.

20Mb	£169.00
40Mb	£199.95
52Mb	£269.00
85Mb	£299.00
127Mb	£349.00
170Mb	£379.00
240Mb	£499.00
540Mb	£749.00
1.2 Gigabyte	£1199.00
Floptical	£379.00
Optical 128Mb	£950
Optical 128Mb Disk	£50

IF YOU REQUIRE A FLOPTICAL WITH THE ABOVE HARD DRIVES PLEASE CALL

E. & O. E. Prices subject to change without notice.
Goods subject to availability.
Specifications subject to change without notice.
All Trademarks acknowledged.

The ICD Pro Utilities £38.00

Alfa Data Mega Mouse with Mouse Mat & Holder £14.95

QUALITY MOUSE FOR ATARI



UNDER NINE POUNDS **£8.95**

DISKETTES



100% ERROR-FREE. You get total reliability. Each diskette is subjected to more than 70 chemical, magnetic and electrical tests to ensure it delivers exceptional accuracy and readability

AS LOW AS £4.49 BOX OF 10

OPTICAL MOUSE & MOUSE-PEN SERIES



Optical Pen Mouse £34.95

MOUSE 400



New from Japan. The 400 DPI mouse with Hi-tech mechanism, microswitch buttons, small, fits nice and snug in the palm of your hand. All at an affordable price of

£14.95

BUILD YOUR OWN HARD DRIVES FOR ATARI COMPUTERS

Casing	£35.00
45 Watt P.S.U.	£35.00
SCSI Cable	£6.00
DMA Cable	£6.00
Power Cable	£6.00
SCSI to Centronics Cable	£18.00
G.E. Soft Host Adaptor	£59.95
SCSI II Cable for Falcon	£34.95
Top Link Controller	£75.00

GASTEINER

Official purchase orders welcome from Educational establishments and major corporates. (Strictly 14 days net). Please phone for approval.

All prices include VAT.
Prices and specifications subject to change without notice. E&OE.

All goods under £50 please add £3.50 p&p and all goods above £50 please add £10 Courier Service. Next day service please call

Unit 2, Millmead Business Centre
Mill Mead Road, Tottenham Hale,
London N17 9QU

Tel: 081 365 1151 (3 lines)
Fax: 081 885 1953

Major credit cards accepted

Access MasterCard VISA

...No Compromise

In the final part of this series, Andrew Wright takes a look at ways of loading and saving documents...

STRONG WORDS

PART SIX: USING DOCUMENTS

It might sound pretty obvious but you can't use a word processor properly if you don't know how to go about loading and saving text files. Everything you write should always be saved because you never know when you might need it again and to do that you have to know the ins and outs of saving files to disk and reloading them when necessary. There are also times when you need to edit or use someone else's text even if it was written on a different word processor – or on a totally different computer. If you're into DTP, you will probably want to export some of your work from the word processor into a format that your chosen DTP program can understand.

Just how you go about getting to grips with the problem depends on the word processor you use but there are some common themes that we'll look at in detail.

First of all there are basically two ways of saving text – with or without formatting. Formatting text is what word processors were designed to do. Every time you underline or italicise a word, indent a paragraph or tabulate a column, you add special characters to the text that tells your word processor what you've done.

This is so that when you load up the same file a week later, it "remembers" the way the text is laid out. The trouble is that almost all word processors have different ways of storing this information, which makes it very difficult for one word processor to load a file created in another word processor.

A good example is the way in which programs like *1st Word Plus* and *WordWriter* store text. Double click on a *1st Word Plus* file from the desktop and select the **Show** option from the resulting dialogue.

You will see one or more lines of characters followed by the main text. Unfortunately it is very hard to read because there are no spaces between the words! The reason is that instead of a space, *1st Word Plus* inserts a different character (the character with ASCII code 1E in hexadecimal or 30 in decimal).



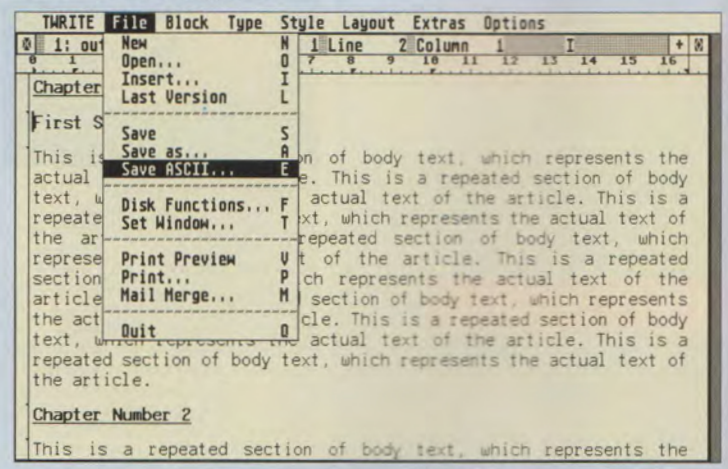
Text editors like Edhak can display every character – this is a 1st Word Plus file showing the squiggle character used to represent a space.

Quite why it does this has never been satisfactorily explained but it shows why *1st Word Plus* files are somewhat difficult to load into other word processors.

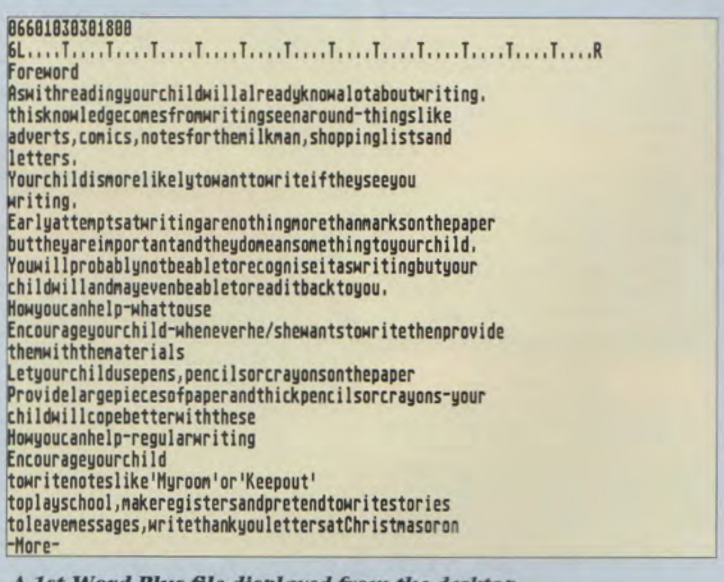
THE END OF THE LINE

Aside from the difficulties of translation, the other big problem with text transfer is that different computers have different ways of signifying the end of a line. When you display a text file, information in the file tells the output device, usually the screen display or the printer, when to end one line and start another. If this were not so, text would simply flow along in a straight line straight off the edge of the screen or paper. This is done by inserting special control codes: a carriage return and a line feed.

Word processors with a word wrap option automatically insert the required codes when the end of a line is reached. In the ASCII set, this means inserting character number 13, a carriage return or **CR**, followed by character number 10, a **line feed**.



Saving ASCII with That's Write.



A 1st Word Plus file displayed from the desktop.

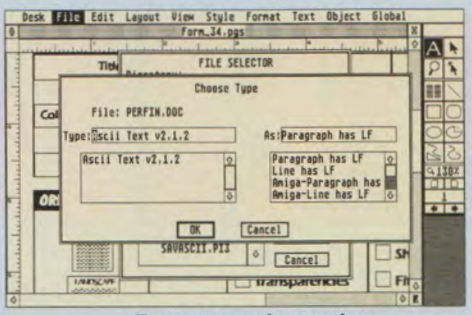
On screen they appear as a small "C" on top of a small "R", and a bell-shaped symbol, respectively.

STs and PCs insert both returns and line feeds but the Macintosh uses only the carriage return to signal a new line. The old 8-bit Ataris used character number 155 which is actually a cent symbol on the ST! If you try and look at a text file originated on one of these computers or a Macintosh, it will appear to be all on one extremely long line!

IMPORTING AND EXPORTING

If you intend to save a text file for use on another computer or a DTP program that doesn't recognise your word processor, you can save a file as text only, sometimes referred to as

ASCII format. Most word processors have this facility, even if it sometimes hidden. In *1st Word Plus* you need to switch off **WP mode** (WP = Word Processor which means all that layout control codes are inserted in the text) then save the file. Others, like *WordWriter*, imply offer you a **Save as ASCIII...** option.



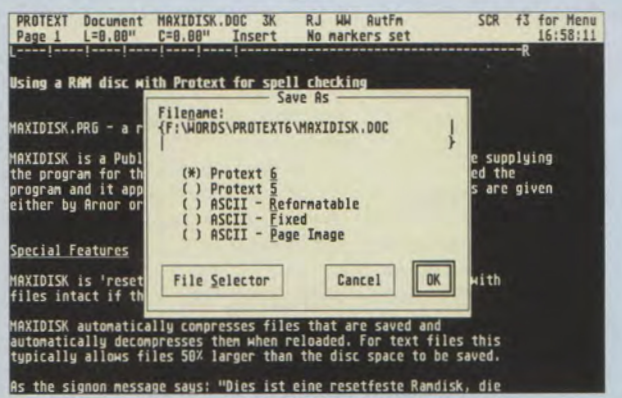
Pagestream importing an ASCII file.

Now both of these programs insert both carriage returns and line feeds at the end of each line so when you import the ASCII file into a DTP program, or another word processor, the original line lengths are used. If you now want to edit and reformat the document, you will find that these invisible line endings resist any attempt to make the text behave as you want.

Protext 6.0 has no less than three different ASCII options. One (ASCII-Fixed) is just the same as that produced by *1st Word Plus* but the other option is reformatable ASCII. This has no end of line markers at all so when it is loaded into another word processor or DTP program, it flows naturally into place, ending lines wherever the current margins dictate.

It does contain some carriage returns and line feeds, incidentally, but these represent end of paragraph markers, not end of lines. Of course many DTP programs like *PageStream* strip these control codes from imported text, offering you a choice as they do so. Others like *Didot Professional* let you create your own filters for stripping control codes. There are also several PD and shareware utilities that will aid conversion, the best known one being *AJAX.PRG* – so called because it "cleans" out text files.

In most cases, your word processor will be able to save your work in a way that maintains the formatting you have given it. If your DTP program understands the file format, this will allow you to keep such things as italicised and emboldened words and even tables and indents. *Pagestream* and *Timeworks* are good at understanding word processor formats.



Protext offers the clearest ASCII options.

ASCII

One way of making it easier for people to swap information is to devise a standard way of storing text files so that the information can be read and adapted for use in any word processor. The standard is called ASCII and it uses a pre-defined table to represent the characters used on a computer.

Every character you see on your computer screen has to be stored in a byte consisting of eight binary digits (or bits). As there are only 256 different values for each byte, from 0 to 255, it follows that there can be no more than 256 different characters. We only have 26 letters in the alphabet and ten numerals so even allowing for upper case letters and the odd symbol, squiggle and punctuation mark, there's plenty of room.

ASCII isn't by any means the perfect standard because it defines only the first 127 of the 256 possible characters, leaving those from 128 to 255 free to be defined in any way at all. Precisely how they are defined is down to the computer's operating system – the ST's set is different from that on a PC and so on.

For example, the pound sign on the ST is represented by character number 156 in the table (being an American system, true ASCII does not feature a pound sign) but on some IBM PCs it is number 163.

Now on an ST, number 163 is actually the letter u with an acute accent. If you import an ASCII text file created on an IBM computer into your ST and try to display it in a text editor or word processor, you will be able to read the text perfectly but wherever you were meant to see a pound sign, you'll see the letter "u" with an accent.

AUTOSAVING AND BACKUPS

Many programs like *1st Word Plus* and *Redacteur* actually help make your data safer by creating backup files every time you save a document. This has two advantages and should be used to the full.

For example, say you write a long letter, saving it on a regular basis. You save what you think is the finished version and then suddenly decide to strike out a paragraph. With a quick press of a button a whole paragraph disappears. You then save the file. If you look at the disk carefully you will see not one file but two – one with a *.DOC extender and the other *.BAK. The BAK file represents the save before last – and in this case it's the one with that deleted paragraph still in it. Just in case you changed your mind...

Other programs like *Protext* and *That's Write* save files automatically every few minutes – you can decide the time span – so that if there is a crash, you can recover much of what you wrote.

STEP BY STEP

LOADING AND SAVING

Loading and saving is an essential part of word processing – if you can't retrieve your work at a later date, you may as well be using a typewriter...



1 ***This is 1st Word Plus and we're about to open an old document, edit it and save it again. First select Open from the file menu...***



2 ***When the file selector appears, choose the right document.***



3 ***As we want to export it for use with another program, it is better to save as text only (ASCII). This is done by turning off WP mode...***



4 ***... and saving it under a different name (an ASC or TXT extender is ideal). Note the warning about loss of layout information.***

THE PRINT

By adding configuration data, Ofir Gal improves on the printing utility from last month.

The PrintMe utility from last month can be improved by adding printer initialisation codes. It would also be useful to have a configuration file containing the printer settings and other instructions like number of lines per page.

PRINTER CODES

Most printers are capable of printing in various modes using more than one font. Typically, a dot matrix or inkjet printer should be able to print in near letter quality (NLQ) or draft mode. Most printers support several fonts and some can even print using proportional fonts. Normally, a word processor lets you select the fonts and other options but as you will see, it is simple enough to add this facility to our program.

All printers have a simple programming language that allows control from a computer. In most cases, the language is rather simple and consists of a combination of short codes although some printers, like the DeskJet and LaserJet, support a more complex set of commands. Typically, a series of control codes starts with the value 27. This signals to the printer that the following values should not be printed but treated as control codes.

As the actual control codes vary from printer to printer, a DeskJet will be used for this example. If you have a different printer, you will have to find the manual and search for the commands which are typically found at the end of the manual – written in very small print...

SETTING THE PRINTER

The BASIC command that allows printer control is *OUT*. This statement sends the value to the chosen device. The format is: *OUT device,value*, where device can be any value between 0 and 5. Most printers are connected to device 0, the parallel port.

Listing one shows you how to use

```
LISTING 1

'a short program to reset a DeskJet

DEFINT a-z

OUT 0,27
OUT 0,ASC("E")
```

the command to reset the DeskJet to its default settings. The program simply sends two values: 27 and the ASCII value of "E". Note that this will only work with a DeskJet printer.

So how does the printer know where the control sequence ends and where the actual printed text starts? This again depends on the printer. The DeskJet simply requires that the last value in a sequence is the ASCII value of an upper case letter.

Setting the Epson FX to print in draft mode using the Elite font is shown in listing 2.

Simply add the printer configuration codes to the beginning of the program and the file will be printed using these settings. You may also

```
LISTING 2

'set FX to draft/elite 12cpi

DEFINT a-z

OUT 0,27
OUT 0,18
OUT 0,27
OUT 0,87
OUT 0,0
OUT 0,27
OUT 0,77
```

like to reset the printer once printing is complete.

CONFIGURATION FILES

A configuration file helps to make the program more versatile. Instead of having values fixed at compilation time, the program can read them from the configuration file. This gives you the ability to customise the program to your needs. In this case, some useful options could be the top and bottom margins, the number of lines per page and the printer control codes.

Listing 3 shows the main part of the program modified in a way that allows implementation of a configuration file.

```
LISTING 3

'main
'refer to last month's tutorial for full listing

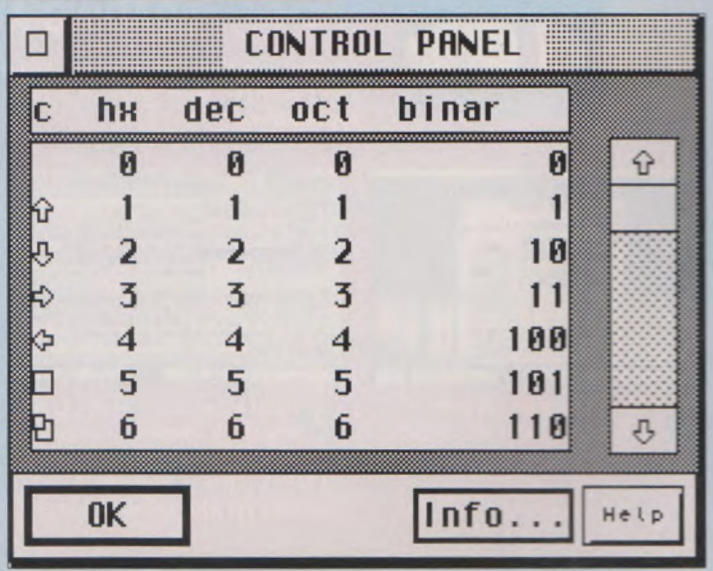
OPEN fi$ FOR INPUT AS #1
WHILE NOT EOF(1)
  IF i=0 THEN                          'it's a new page
        FOR i=1 TO header_size
              LPRINT                   'print blank lines
        NEXT i
  END IF
  LINE INPUT #1,a$
  LPRINT a$
  INCR i
  IF i=max_lines THEN
        INCR page
        footer fi$,page
        i=0
  END IF
WEND
IF i<max_lines AND i>0 THEN
  INCR page
  FOR j=i TO max_lines
        LPRINT
  NEXT j
  footer fi$,page
END IF
CLOSE #1
```

CREATING THE CONFIGURATION FILE

We'll start by defining the two variables *max_lines* which defines the number of lines per page, and *header_size*, the number of lines for the header, or top margin. The configuration file will contain pure ASCII text which you can create with any text editor, including the *HiSoft BASIC* editor.

Enter the following text into a file and save it to the same folder as the *PRINTME.TTP* program, giving it the name *PRINTME.CNF*. Ensure that the last line is terminated with a carriage return:

```
65
3
```



This rather useful CPX module can help you convert text characters to ASCII values and back. It also displays the hexadecimal representation of the values – a must for all programmers!

ROUTINE

The first line contains the value for *max_lines* and the second the number of lines for the top margin. The next step is to write the code that loads the configuration file.

LOADING THE CONFIGURATION

We can use the very same *LINE INPUT* command to load the configuration file. The only addition required is to convert the text to numeric values. BASIC provides a simple function that does just that – *VAL* takes a text string as a parameter and returns its numerical value. You can find the relevant code in listing 4. The code should go before the main *WHILE...WEND* loop.

Now let's look at the slightly more complex issue of printer codes again. Since the code sequence is likely to be more than just a couple of numbers, it's best to use an array. In fact, the array could also be used to store the values of *max_lines* and *header_size*. The actual conversion to numerical values can be delayed so

```
LISTING 4

'loading a configuration file

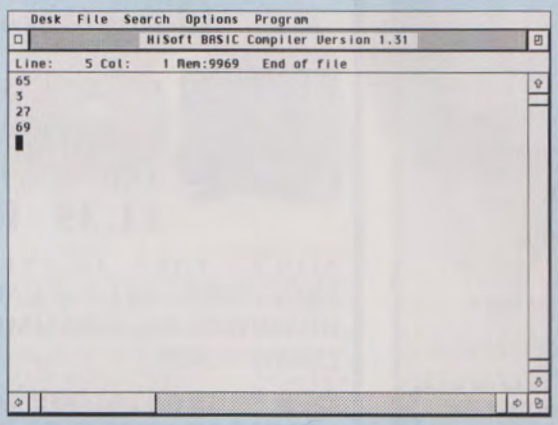
OPEN "PRINTME.CNF" FOR INPUT AS #1
LINE INPUT #1,tmp$
max_lines=VAL(tmp$)
LINE INPUT #1,tmp$
header_size=VAL(tmp$)
CLOSE #1
```

that the array would contain strings that makes it much simpler to load the configuration file in one simple loop. The file should again be created with a text editor and contain the first two values as before, followed by the printer codes, one per line. Note that the actual numerical values for the printer code are required. A configuration file that simply rests the DeskJet will therefore contain the values - 65, 3, 27, and 69 which is the ASCII value of E. The actual loading code is shown in listing 5.

```
LISTING 6

'init printer using configuration file

SUB init_printer
SHARED cnf$(),no_of_options
STATIC i
FOR i=2 TO no_of_options
   OUT 0,VAL(cnf$(i))
NEXT i
END SUB
```



Configuration files can be created and edited with any text editor. Make sure that the last line is followed by a carriage return.

```
LISTING 5

'load full configuration file

DIM cnf$(50)                        'this should
                                    'be enough

OPEN "PRINTME.CNF" FOR INPUT AS #1
WHILE NOT EOF(1)
  LINE INPUT #1,cnf$(i)
  INCR i
WEND
CLOSE #1
no_of_options=i-1                   'store number of
                                    'cnf lines
```

...AND FINALLY

The program can now be modified to perform the printing initialisation as part of the startup code. The main code remains virtually the same, only the strings in the array should be converted to numerical values for the first two variables. A sub-program called *init_printer* will send out the printer codes one by one and when this is completed t he main part of the program can be executed.The printer initialisation sub-program is shown in listing 6.

The sub-program starts by looking at the third element of the configuration array since the first two contain the number of lines per page and top margin values. It then sends the numerical value of the text to the printer. The loop is repeated until all the values are sent. Listing 7 contains the new and final main loop.

NEXT MONTH

This ends this series of BASIC tutorials. Next month I will embark on a full tutorial in GEM programming utilising our cover disk program *KResource* in conjunction with *HiSoft BASIC*. The series of tutorials will cover resource files, object trees, form handling and even menus, so make sure you don't miss it!

NEW COMMANDS

***ASC*: A BASIC function that takes a single text character and returns its ASCII value.**
***CHR$*: This function does the reverse and converts an ASCII value to a text character.**
***VAL*: This BASIC function returns the value of a string expression.**
***OUT*: A BASIC command used to output raw data to various devices such as printers or modems. Possible values to output to are: 0 (Parallel port), 1 (Serial port), 2 (Console), 3 (MIDI), 4 (Keyboard controller) and 5 (Direct screen output). You should avoid sending values to the keyboard controller unless you are absolutely sure of the effect...**

```
LISTING 7

'the main loop using the configuration file

max_lines=VAL(cnf$(0))              'convert text
                                    'to value

OPEN fi$ FOR INPUT AS #1
WHILE NOT EOF(1)
  IF i=0 THEN
        FOR i=1 TO VAL(cnf$(1))     'previously
                                    'header_size
                LPRINT
        NEXT i
  END IF
  LINE INPUT #1,a$
  LPRINT a$
  INCR i
  IF i=max_lines THEN
        INCR page
        footer fi$,page
        i=0
  END IF
WEND
IF i<max_lines AND i>0 THEN
  INCR page
  FOR j=i TO max_lines
        LPRINT
  NEXT j
  footer fi$,page
END IF
CLOSE #1
```

MERLIN

TEL: 0453 882793

WE ASK YOU TO TELL US WHAT YOU WANT ON YOUR DISKS FOR £1.25 PER DISK INC. P&P

LICENCEWARE – PRICES VARY

POW 16 FREAKED OUT 2 – Find your way through the maze £3.00
BW 122 SUPER SCRAMBLE – Horizontal scrolling shoot 'em up £2.75
EXC 1 PROBE ST v2.1 – Ripper utility exclusive to Merlin £3.95
EXC 2 NOSTRAM '93 – Brilliant maze/shoot 'em up exclusive £2.00
OCL 2 MURDER ON THE ORION EXPRESS – Humorous sci-fi murder mystery £3.00

PD/SHAREWARE – £1.25 PER DISK

MPD 1661 INVOICE MASTER – Superb invoicing system
MPD 1553 FATE MASTER – Graphic adventure game
MPD 1617 MAGIC TOMB – Maze game
MPD 1646 PAD v2.4 – 1 Meg. Best PD art package
MPD 0825 MICHAEL'S BIG ADVENTURE – Graphic adventure game for children

To order any of these, complete the coupon and send it with cheque/P.O. payable to Merlin PD. To get a catalogue send 3 x 1st class stamps.

Merlin PD, 11 Grange Close, Minchinhampton, Stroud, GL6 9DF

Please send disks: Name .....
No..... Address.....
No..... .....
No..... .....
No..... ..... Postcode.....
I enclose cheque/P.O. for £.....

A F WEAVER ENGINEERING

BRITAIN'S BIGGEST COLLECTION OF P.D. SOFTWARE

181A BRECKNOCK ROAD, LONDON N19 5AB

PD Warehouse

071 267 3308



WE NOW STOCK **OVER 400 GAMES DISKS ALONE** AND MOST OF THEM ARE JUST **£1.35 EACH!!!** WE ALSO STOCK VAST QUANTITIES OF UTILITIES, EDUCATION, ART PACKAGES, MUSIC, ACCOUNTS, BUSINESS, PROGRAMMING AIDS, DEMOS AND LOADS MORE.

OUR FREE CATALOGUE CONTAINS OVER 30 A4 PAGES CRAMMED TO THE MAX WITH 1000's OF UNBELIEVABLE BARGAINS

UNDER NEW MANAGEMENT

A Happy and Prosperous New Year to all our Customers

EX SOFTWARE 3.5" DS/DD DISKS

50	14.99
100	28.99
200	56.99
250	69.99
400	109.99
500	134.99



SPECIAL PURCHASE OF SOFTWARE HOUSE SURPLUS STOCK DISKS CARRY OUR NORMAL GUARANTEE AND COME COMPLETE WITH NEW LABELS

3.5" SUPERIOR LOCKABLE DISK BOXES

Qty	100Cap	140Cap	200Cap
1	4.49ea	6.49ea	11.95ea
2	4.39ea	6.39ea	11.75ea
4	4.19ea	6.19ea	11.50ea
6	3.99ea	5.99ea	11.25ea



SNAP COMPUTER SUPPLIES LTD

HOTLINE 0703 457111

RIBBONS – POST FREE

Full Mark Brand	2 off PRICE EACH	4 off PRICE EACH
Citizen 120D/124D Swift 24	2.75	2.55
Citizen Swift 24 Colour		11.95*
Panasonic KXP 1080/1123/1124	3.25	3.05
Star LC10/LC20	2.60	2.40
Star LC10-4 Colour	5.90	5.70
Star LC24-10/24-200	2.95	2.75
Star LC24-10 Colour		9.95*
Star LC200	3.00	2.80
Star LC200 Colour		9.95*
Star LC24-200 Colour		9.95*
COMPATIBLE INK JET REFILL		
HP Deskjet 500 Double Refill		9.95
Canon BJ10E Double Refill		9.95

Minimum order – 2 ribbons, except those marked with an asterisk*

ACCESSORIES – POST FREE

Mouse Mat	2.99
Mouse Holder	2.99
Roll 1000 3.5" Disk Labels	8.99
Atari ST dust cover	3.50
Philips monitor cover	3.99
Star/Citizen/Panasonic 80 Colour Printer cover	3.99

All products are subject to availability – All prices include VAT
Please add £3.50 p+p for disks and boxes. E&OE
– Overnight £5.99 –

VISA

SNAP COMPUTER SUPPLIES LTD. Fax: 0703 457222
Unit 16, The Sidings, Hound Road, Netley Abbey, Southampton SO3 5QA

Access

Jon Ellis considers how to get rid of all those .BAK files...

NO WAY BACK!

So far in our exploration of C we have created two programs that actually perform some potentially useful work: the multiple file deleter, and the program to print all the folder names on a disk. As the next step, we are going to combine the technology developed for these two programs into a worthwhile utility.

Many applications, including the *Prospero C* workbench, create backup files during use. When a change is made to a C source file, the workbench renames the original copy of the file with a .BAK extension, and then saves the new version with the usual .C extension. Other applications create .BAK files in a similar fashion, though sometimes .OLD or other extensions are used.

Backup files can be invaluable in the event of an unwanted modification being saved to disk by mistake, but after a while they can tend to clutter up a hard disk. To ease this problem, it is useful to purge the disk of these files occasionally. This requires a program that can search out .BAK files anywhere on a disk, even those buried several folders deep on a hard drive, and delete them.

HOW TO DO IT

C source code for a program to perform this task is presented as *PURGE.C* on the cover disk. The vast majority of the code should look familiar, as it is an amalgam of *DIRLIST.C* and *DELETE2.C* from previous tutorials. The program starts by prompting the user for the path to be purged and the extension of the files to delete. For convenience, the program will delete .BAK files by default.

Let's look at the code that drives the user interaction (Listing 1), as it includes a couple of new features.

```
Listing 1

while(TRUE)
  {
  printf("Delete files with which extension (BAK)?");
  gets(extension);
  if (extension[0] == '\0')
        {
        strcpy(extension,"BAK");
        break;
        }
  if (strlen(extension) <= 3)
        break;
  printf("That is not a valid extension - try again\n");
  }
strupr(extension);
```

This section of the program is based around a **while** loop, a construct that we met briefly in the third tutorial. The code inside the curly brackets is repeated until the expression inside the **while** statement's brackets becomes equal to 0, when the loop ends. In this example, the loop-control expression is a symbol, TRUE. TRUE is defined at the beginning of the program as being equal to 1 – see the box for more details on symbol definition. Since this **while** expression always works out to a non-zero number, the loop will be repeated indefinitely.

Obviously, this construct would not be particularly useful on its own, as the program would never progress beyond the loop! This behaviour can be modified using a couple of new C keywords – **break** and **continue**. These are discussed further in the relevant box.

Armed with this knowledge, it should be clear that the code fragment in Listing 1 will prompt the user for a file extension to purge. If the user simply presses <Return>, the input string will be empty. In this case "BAK" is used as the extension, and the loop broken out of. If the user enters some text, some simple error checking is performed. Valid file extensions must be 3 or fewer characters in length – these again cause the loop to be terminated by a **break** statement. Longer input strings result in an error message being printed, and another iteration of the loop.

```
Listing 2

strcpy(files,path);
strcat(files,"\\*.");
strcat(files,ext);
strcpy(working_path,path);
s = working_path + strlen(working_path);
*s++ = '\\';
*s = '\0';
```

```
Input string:    E:\PROSPERO\WORKING      and      BAK
Search string:   E:\PROSPERO\WORKING\*.BAK
```

ON THE DEFENSIVE

There is another point to be made about this portion of the code. Since valid file extensions are no more than three characters long, why does the program define a 64 character array into which the extension string is read?

Well, what would happen if the extension array were four characters long (three plus one more for the null-terminator), and the user entered a long string by mistake? Since **gets()** has no idea how big our array is, it will quite happily copy the whole of the input text into memory, beginning at the start of the array, and continuing for as long as necessary. This would result in anything after the array being overwritten. The effects of this are somewhat unpredictable, but may range from nothing, though strange program behaviour, to a crash.

By making the input array large, we hope to avoid this scenario. In general, it's a good idea to make any arrays needed for user input much larger than is strictly necessary.

DOING THE WORK

Having received instructions from the user, code from *DIRLIST.C* is then used to allow the purging program to locate every folder on a path. Each folder is then searched for files with the specified extension which are deleted using **remove()**. Most of this part of the program uses a routine adapted from *DELETE2.C*, but there is a little more new code in the **delete_files()** function.

The input to **delete_files()** is in the form of two strings: one that specifies the current path under consideration, and another that contains the extension of files to be purged. To do the search, these have to be assembled into a single search string. This is done by copying the current path into an array, "files", appending a backslash and a wildcard, and then the extension:

More string manipulation is needed to create a file specification for the **remove()** function. Each filename found by the **findfirst()**/ **findnext()** search has to be tacked onto the current path before the function is called. This is done in two stages: first, the current path is copied into another array, and a backslash added to the end. The character pointer "s" is left addressing the null-terminator of this string. As each filename is found by the search code, it is copied into the string at this point, creating a complete file specification ready for deletion. Each successive filename overwrites the previous one, but the current path portion of the string stays constant.

NEXT MONTH

In the next column, we'll take our first steps into GEM programming in C by writing a dialogue box interface for our purging program. To do this, we'll need an essential programming utility which you'll find on the next cover disk... See you then.

DEFINING SYMBOLS

The statement **#define TRUE 1** that appears towards the beginning of *PURGE.C* is an example of the use of C's symbol definition facility. This allows alphanumeric symbols to be defined as a "shorthand" for other text, and is a valuable tool in increasing the readability of programs. The **#define** syntax is:

```
#define <symbol> <replacement_text>
```

Wherever the <symbol> occurs in the source code, it is replaced by the specified text prior to compilation.

#define is most often used to define meaningful symbols to replace numbers. This is similar to the purpose of EQU in assembly language, or MANIFEST in BCPL. It is a convention that **#defined** symbols are written in upper-case letters to clearly distinguish them from normal C code. Many C programs will include the statements:

```
#define TRUE  1
#define FALSE 0
```

to increase the readability of Boolean tests like:

```
if (flag == TRUE)
  go_for_it();
```

Another situation where **#define** is commonly used is to define symbols governing the limits of program performance. In *PURGE.C* we could have **#defined** a symbol, say, MAX_PATH_LENGTH, as being equal to 256 bytes, and then used declarations like:

```
char files[MAX_PATH_LENGTH], working_path[MAX_PATH_LENGTH];
```

This would have the advantage that, simply by changing the definition of MAX_PATH_LENGTH, we could alter the size of all the relevant arrays in the program.

The **#define** keyword is related to **#include**. Both of these are examples of preprocessor directives – commands executed by one of the early phases of the compiler, before the C compilation proper is started. Unlike C code itself, preprocessor directives are sensitive to layout – the "#" character must be the first character on a line. Also, in a **#define** directive, the <replacement_text> should not contain any spaces.

#define offers far more flexibility than we have exploited here. You'll meet examples of this in later tutorials.

COMMON BUGS AND ERRORS

Imagine the frustration. You've just finished your latest C program, and the compiler has accepted it without any complaint. You link it with the libraries, and run it, but it doesn't work as expected. What's worse, you can't see anything wrong with the code. You've just come across a run-time error.

Just as C gives you the power and freedom to write the program you want, it also gives you the opportunity to include some impressive bugs. The worst of these are mistakes that are perfectly legal C (so the compiler is happy) but stop the program working (so you're unhappy). Here's a tip that should help you stop tearing your hair out:

EXTRA SEMICOLONS

One common mistake is to put a semicolon at the end of a line where there shouldn't be one. This is a particularly insidious error, because most lines have semicolons at the end. The trouble is that a semi-colon on its own is legal – it means... do nothing! The following code is a silly loop that just counts up to 12, without doing anything:

```
for (f=0; f<12; f++); /* Do nothing */
```

Put like that, it looks rather obvious, but look at this:

```
for (f=0; f<12; f++);
  printf("17 * %d = %d\n",f,17 * f);
```

If this is run, only one line of text is printed, corresponding to an "f" value of 12. The extra semicolon has made the loop run round in a futile way, until it ends with f equal to 12. The **printf()** function call is then executed as normal, but outside the loop.

Besides **for** loops, other places to watch out for extraneous semicolons are after **if**, **while** and **do** lines. Note that there is a semicolon after the **while** test in a **do-while** loop, but not after the test in a **while** loop. Confused? Read the example programs carefully, and you'll soon get the hang of it.

Here's a question for you – in the following code, why is the extra semicolon completely catastrophic?

```
while (TRUE);
  do_useful_function();
```

More tips in later tutorials.

BREAK AND CONTINUE

To provide flexibility in determining the flow of control within loops, C provides two keywords that we have not yet encountered: **break** and **continue**.

The effect of a **break** statement is to force an immediate exit from one level of loop.

Control is transferred to the first statement after the end of the loop. All three loop types, **for**, **do-while** and **while**, can be broken out of in this way. **break** is usually combined with an **if** statement to force a conditional exit from a loop, over and above the normal loop continuation test.

Continue is used in a similar fashion, but instead of terminating a loop, it forces an immediate jump to the logical test that controls the loop. You can think of it as a jump to the closing curly bracket that ends the block of statements repeated by the loop. **Continue** is often used when all the processing for one iteration of the loop is finished, and the programmer wants to move on to the next pass of the loop immediately.

Once again, **continue** can be used in all three loop constructs.

SEPTEMBER ISSUE IS SOLD OUT...

...but we still have some of the cover disks! If you missed out on *Prospero* C and would like a copy of the disk along with the first tutorial, send £2.50 (payable to Europress Enterprise) to:
***Prospero C Disk*, ST Review,**
Europa House, Adlington Park,
Macclesfield SK10 4NP.



Don't risk missing your

ATARI ST REVIEW

Hand this order form to your local friendly newsagent TODAY and he'll make sure you never miss out!

ATARI ST REVIEW

Please reserve a copy of Atari ST Review magazine every month until further notice.

☐ I will collect

☐ I would like it delivered to my home

Name .....

Address .....

.....

.....Postcode.....

And a message from us to your newsagent: Atari ST Review should be available from your local wholesaler. If not, contact the Circulation Department at Europress on 0625 878888.

SUPER SOFTWARE SALE - ALL PRICES REDUCED

* COMPILATION SUPER DEALS *

10 Great Games	£9.95
Magnetic Scrolls Collection	£9.95
2 Hot 2 Handle	£9.95
Virtual Reality Vol 1	£9.95
Virtual Reality Vol 2	£9.95
Action Masters	£9.95
Super Heroes	£9.95
Champions	£8.95
Hannah Barbera Collection	£6.95
Light Force (ST Only)	£5.95

* BEST SELLER SPECIALS *

Push Over	£16.95
Zool	£17.95
Street Fighter 2	£18.95
Civilisation	£25.95
Sensible Soccer 92/93	£17.95
Dungeon Master/Chaos Strikes Back	£23.95
Populous II (520)	£22.95
Chaos Engine	£17.95
Premier Manager	£17.95
Leisure Suit Larry 1	£17.95
Space Inv/Pit Fighter	£12.95

* CLASSIC STRATEGY GAMES *

Firezone	£6.95
Borodino	£9.95
Vulcan	£17.95
Overlord	£17.95
Frontline	£18.95
Ancient Battles	£18.95

* BARGAINS AT £5.95 EACH * * OR ANY TWO FOR £10.95 *

James Pond – Twin World – Baal – Windwalker – Smash TV – Big Run – Fun School 2 – Fighting Soccer – Starblade – European Super League – Hudson Hawk – Galaxy Force – Total Recall – Photon Storm – North and South – Gold Runner 2 + Data Disk – Bubble Bobble – Tetra Quest – Sleeping Gods Lie – Bloodwych – Rick Dangerous 2 – Blue Angel 69 – Football Manager 2 – Robocop 2 – Carrier Command – Sonic Boom

* RIBBONS *

Star LC10 Mono	£3.45
Star LC10 Col	£5.95
Star LC24/10 Mono	£3.95
Citizen 120D Mono	£3.45

* SUPER MODEM DEALS *

Like to step into the world of Comms? Get all your PD programs for the price of a phone call? Access electronic mail? YES? OK, we will help you get started. All our modems come supplied with Comms software and information leaflets on downloading, archiving, electronic mail and more!

Linnet Plus	£144.95
Linnet Quad	£209.95
USR 14.4 Sportster with Fax	£299.95
USR Courier Quad V42 Bis	£199.95
ZyXEL U-1496 E 19.2 – Fax	£319.95
ZyXEL U-1496 E+ 16.8 – Fax	£379.95
ZyXEL U-1496 S+ 19.9 – Fax	£499.95

** CALL FOR STE PRICES! **

* THE ATARI FALCON 030 *

	1 Meg	4 Meg
No HD Drive	£479.95	£649.95
65 Mb Drive	–	£749.95
127 Mb Drive	–	£849.95
209 Mb Drive	–	£929.95

* DISKS W/LABELS * BRANDED

BULK	DSDD	DSHD	DSDD	DSHD
10 =	£4.40	£5.95	£6.00	£9.50
50 =	£19.95	£24.95	£27.50	£45.00
100 =	£36.95	£44.95	£50.00	£85.00
200 =	£68.95	£84.95	£95.00	£164.00

* ACCESSORIES *

12 Holder Slimpak	£0.95
100 Holder Lockable	£7.95
150 Holder Stackable	£15.95
3.5" Disk Labels 40 for	£0.95
3.5" Head Cleaning Kits	£3.95
ST Dust Covers	£3.95

* PRODUCTIVITY SOFTWARE *

3D Construction Kit	£19.95
C-Breeze	£6.95
Data + Security Handler	£6.95
Cyber Paint v2	£39.95
Utilities Plus	£9.95

MODEM USERS CALL GAMES HQ ON:

Protocol BBS – 0642 596597 (24 hrs)

Send 3 2nd Class Stamps for our Disk Catalogue
P&P £1.50 PER WHOLE ORDER,
£2 EXTRA PER 50 DISKS, £5 FOR COMPUTERS
We accept all major Credit Cards

GAMES H.Q. Dept STR1, Box 17, Coulby Newham, Middlesbrough, Cleveland TS8 9YW

FAX: 0642 822 700
TEL: 0642 595 182

COLOUR KITS for MONO PRINTERS

Ever wished you'd bought a colour printer instead of a mono one? Wouldn't it be nice to print out pictures in colour? Now you can with Atari "FlexiKolor Kit". Each Atari FlexiKolor kit comes complete with everything you need to print in colour, including superb software. The colour kit is simple to use, the ribbons fit exactly the same way as your black ribbons so it will not affect your guarantee. Also on all models listed below paper alignment is automatic, you do not have to manually align. PRINTS AS GOOD AS COLOUR PRINTER. If your printer is not listed below please phone. Atari FlexiKolor kits for Star LC10, LC20, all Star 24 Pin. Panasonic 1080/81/1123/1124. Epson FX80, LQ400, LQ800 etc. Citizen 120D+, NEC P6, P6+, Seikosha 1900+. Please note colour kits come complete with coloured ribbons. **COMPLETE KIT £39.95**

FLEXIDUMP PLUS 2

THE COLOUR SOFTWARE FOR YOUR COLOUR PRINTER

- ★ Total colour control
- ★ Balance control for picture enhancement
- ★ Select area to be printed
- ★ Select size to be printed
- ★ Page control
- ★ Colour sieve
- ★ Ink correction
- ★ Automatic poster mode for larger than A4
- ★ Gamma correction (fully adjustable and saveable)
- ★ Spooler for colour letterheads etc
- ★ Multiple copy control
- ★ Colour correction
- ★ Colour/mono catalogue function
- ★ Imports a large range of file types including (IMG) larger than screen size, tiny, Spectrum 512, IFF, Degas, Neo, IFF (Amiga), HAM (Amiga) yes you can even print Amiga pics.
- ★ Colour separation (Print colour on your Bubble Jet)
- ★ Dot pattern control
- ★ Pattern rotate
- ★ Ideal for T-shirt printing
- ★ Now with 'smooth' control, get rid of those jagged edges.
- ★ Large range of dithering (dot pattern) modes.
- ★ Run in any resolution, view, manipulate and print in any other resolution
- ★ Colour catalogue function will print a miniature of each picture configurable between 1 to 8 across
- ★ Will drive 9 or 24 pin Star, Citizen Swift, Panasonic, NEC, Epson, Canon etc. The colour pictures possible with this new version will astound you.

STILL ONLY £39.95 inc
UPGRADE FLEXIDUMP PLUS TO FLEXIDUMP PLUS 2,
ONLY £11.95 inc. RETURN MASTER DISKS

T-SHIRT PRINTING RIBBONS

PRINT ON NORMAL PAPER IRON ON T-SHIRT

4 Colour Citizen Swift	£29.95
4 Colour Citizen Swift (Reload)	£14.95
4 Colour Star LC10	£14.95
4 Colour Star LC200 9 Pin	£19.95
4 Colour Star LC200 9 Pin (Reload)	£12.95
4 Colour Star LC200 24 Pin	£29.95
4 Colour Star 24 Pin (Reload)	£14.95
4 Colour Seikosha SL95	£29.95
4 Colour Seikosha SL95 (Reload)	£14.95
1 Colour Citizen 120D/Swift	£11.95
1 Colour Star LC10	£11.95
1 Colour Star LC200 9 Pin	£11.95
1 Colour all Star 24 Pin	£11.95
1 Colour Epson FX80/LQ400/MX80	£11.95
1 Colour Epson LX80	£11.95
1 Colour Epson FX100	£11.95
1 Colour Panasonic KXP 1080	£11.95
1 Colour Taxan/Canon 1080A	£11.95

Heat transfer Pens 5 large red/orange/yellow/green/blue, Large pens have a marker size nib .....£14.95 a set
Heat transfer Pens 5 small red/orange/yellow/green/blue, Small pens have a fine nib.....£11.95 a set

T-SHIRT RIBBONS NOW AVAILABLE IN RED, BLUE, GREEN, BROWN, YELLOW and BLACK AND FOR A WIDE RANGE OF PRINTERS
Phone our order line on 0923 894064
Atari ROM Cartridge takes two 27256 or 27512 EPROMS ..£11.95
ALL PRICES INCLUDE VAT AND CARRIAGE
Now available: T-Shirt Printing for HP Deskjet. Also Printing on to Mugs, Plates, Glass and Aluminium with Transferlaq.

How to order: Enclose cheques/PO made payable to: CARE ELECTRONICS or use Access/Visa.

MAIL ORDER
CARE ELECTRONICS
Dept STR, 15 Holland Gardens, Garston, Watford, Herts, WD2 6JN.
Tel: 0923 894064 Fax: 0923 672102

COLOUR PRINTER RIBBONS

Don't throw away your plastic printer ribbon cases when the ribbon wears out. Just take the top off, take out the old ribbon and reload it with a new one. It's simple. Full instructions supplied.

Reloads for:-

Star LC200 9 Pin 4 Colour (Normal Ink)
1 Reload – £5.99.....5 Reloads – £23.95
Star 24 Pin 4 Colour (Normal Ink)
1 Reload – £6.99.....5 Reloads – £29.95
Citizen Swift 4 Colour (Normal Ink)
1 Reload – £6.99.....5 Reloads – £29.95
Panasonic KXP2180/2123 4 Colour (Normal Ink)
1 Reload – £6.99.....5 Reloads – £29.95
Seikosha SL95 4 Colour (Normal Ink)
1 Reload – £6.99.....5 Reloads – £29.95

Ink ribbons also available in Gold, Silver, Magenta, Orange, Purple, Brown, Green, Blue, Red for a wide range of printers.
Special re-ink for Panasonic printers and Star LC200 9-pin black 59ml bottle.....£14.95

NO MESS INK REFILLS FOR HP DESKJET PAINTJET AND CANON BUBBLEJETS

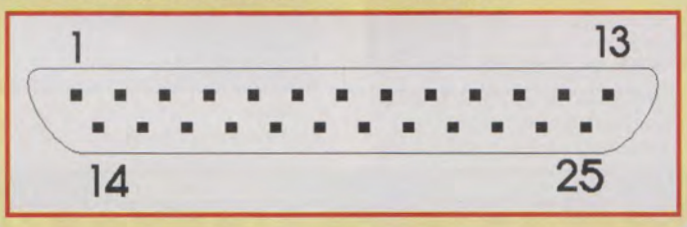
"CARE THREE PACK" will refill HP51608A Cartridge 3 times. The Canon BC-01/SJ48 Cartridge 3 times. Three Pack available in Yellow, Magenta, Cyan, Red, Blue, Green, Brown, Purple, Black **£14.98 each.**
"TRI-COLOUR PACK" 1 refill of Yellow, Magenta and Cyan **£17.95.**
"CARE SIX PACK" will refill HP51608A Cartridge 6 times. The Canon BC/01 Cartridge 6 times.
6 PURE BLACK REFILLS ONLY £24.95
Please state type when ordering

COMMS COACHING

In the last part of the current series, Graeme Rutt investigates how you control the flow of data...

25 PIN SERIAL PORT

1 Protective Ground (PG)
2 Send Data (SD)
3 Receive Data (RD)
4 Request to Send (RTS)
5 Clear to Send (CTS)
6 Data Set Ready (DSR)
7 Signal Ground (SG)
8 Carrier Detect (CD)
9 Reserved for Test
10 Reserved for Test
11 Unassigned
12 Secondary Carrier Detect
13 Secondary Clear to Send
14 Secondary Transmitted Data
15 Transmit Timing (TT)
16 Secondary Received Data
17 Receiver Timing (RT)
18 Unassigned
19 Secondary Request to Send
20 Data Terminal Ready (DTR)
21 Signal Quality Detect
22 Ring Indicate (RI)
23 Data Signal Rate Select
24 Transmit Timing (TT)
25 Unassigned



FLOW CONTROL AND ATARI

The programmers who write TOS have never quite managed to come to grips with hardware flow control. Apart from TOS 2.06, 3.06 and possibly Falcon TOS, it has always been broken and won't work correctly.

To rectify this problem a number of system patches are available.

My favourite is *SERFX20* which claims to cover all versions of TOS up to 3.06.

You'll even find a copy on this month's cover disk!

In the past few months I've taken you through most of the common Hayes commands. In addition, we've taken a look at modem speeds and standards. In this, the final article in my modem tour we're going to look at two specific areas that most modem owners need to know about: flow control and carrier detection.

LOLLIPOP LADY...

After turning the telephone signal into digital data, modems send this information as a stream of bytes into your computer. These bytes are stored in a circular buffer, which in turn may be read by any program equipped to deal with it – normally a comms package.

Okay, we have a system here – but like most systems it can break down. What happens if your comms program isn't loaded, is off doing something else other than reading the buffer or is too slow to cope with a high-speed data flow? Or, if you've set up a data rate to your modem that is higher than it can send at?

Simple – you lose characters. And if, for instance, you're downloading a program, you can't afford to lose a single byte.

To stop this occurring, modems use flow control. If data is flowing too fast for either end to handle it is stopped until the buffer is cleared. Then data transfer is started again until there is another lock up. This simple system comes in two flavours: hardware and software flow control.

The former uses the RTS and CTS lines in your modem cable – if it has them – to control the flow of data. CTS is used when sending data; if the voltage is set high then the computer will send data, if set low then it won't. RTS is used when receiving data from your modem; if set high then the modem will send data to your computer, if not, it won't.

Software flow control is a simpler system. Specific characters that stop and start transmission are inserted into the data stream. These are known as XON and XOFF and the characters used are <Control>-<S> and <Control>-<Q>. But there is a problem with this method of flow control. If the XON and XOFF characters are part of a file that's being sent, it will cause problems. This can happen *very* easily in a 300Kb picture file!

IN CONTROL

Now we know what flow control is, how do we use it? Well, the appropriate Hayes command is **AT&Kn** where n is 0 for no flow control, 3 for hardware flow control and 4 for software flow control. It is important that your comms package mirrors the type of flow control used – I advise hardware, by the way – and you will normally find a flow control entry in or near the RS232 port set-up.

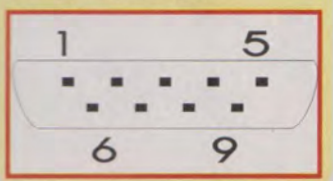
A related area is that of Carrier Detect. This also uses a line in your modem cable – the CD line. If the line is in the cable and working properly it provides comms packages and bulletin board programs with a method of seeing if your modem is currently connected to another modem. To make your modem correctly change the state of the CD line you must issue it with the **AT&C1** command. If it's set to **AT&C0**, then the carrier detect is set to be on at all times and this can cause great problems with some comms packages.

Finally, as we've been talking modem cables I'd like to leave this explanation of your modem with the pin-out diagrams for both the 9 and 25 pin serial ports found on various makes of Atari computers. Next month I'll be starting a series of articles on how to use the various Atari-orientated bulletin boards across the country!

If you have any problems with comms then you can get in touch with me by E-mailing sabbath@cix.compulink.co.uk.

9 PIN SERIAL PORT

1 Carrier Detect (CD)
2 Receive Data (RD)
3 Send Data (SD)
4 Data Terminal Ready (DTR)
5 Ground
6 Data Set Ready (DSR)
7 Request To Send (RTS)
8 Clear To Send (CTS)
9 Ring Indicate (RI)



JARGON JOGGER

RTS: Request To Send is used to halt data transmission from the modem to the computer

CTS: Clear To Send is used to halt data transmission from the computer to the modem

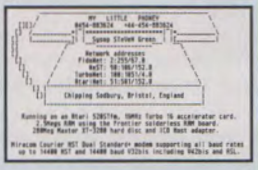
(Circular) Buffer: A buffer is an area of memory set aside to store incoming or outgoing data. In a circular buffer, when the end of buffer is reached the next piece of data is placed at the start.

ALL ABOARD!

Mark Baines introduces another set of Atari-specific BBSs...

MY LITTLE PHONE

INFO: *Dial-in: 0454 883624 (Chipping Sodbury)*
Sysop: Steven Green
Times: 24 hours
Speeds: Up to 14,400 bps with V42bis
NeST 90:106/152
TurboNet: 100:1051/4
FidoNet 2:255/67
AtariNet 51:501/152



Steven is a developer of *BinkleyTerm*, the FidoNet-compatible mailer used by most networked Atari systems worldwide, including points and private nodes.

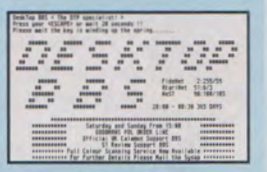
The Intergalactic Space Empire on-line game is available as are hundreds of megabytes of files available for download without restrictions. All the echoes and file areas of interest to Atari users are available.

My Little Phoney's specialism is in programming, with files and message areas of interest to programmers. Steven is a Software Engineer with many years of experience programming leisure software for home computers using C, C++, 80x86 and 680x0. He will answer technical programming questions and assist new programmers to find and correct bugs in their source code, as well as suggesting improvements to their programming style.

Also of interest is the PSION series 3 files download list, as well as Space, Astronomy, Science and Paranormal message areas.

DESKTOP BBS

INFO: *Dial-in: 0782 541305 (Stoke-on-Trent)*
Sysop: Alan Woodcock
Times: 8pm (3pm weekends) – 8.30am
Speeds: Up to 14,400 bps with V42bis
NeST 90:100/105
FidoNet 2:255/59
AtariNet 51:6/3



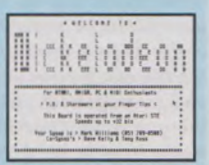
Desktop BBS is the UK *Calamus* Support BBS with about 750 Calamus fonts and about 800 items of clip art available for downloading. On-line experts with ready advice are also available or queries can be passed onto JCA themselves who will contact the customer direct.

There is a full Laser printing service for users and a full colour scanning service from B.C. Design & Print who can be contacted on the BBS.

An order section for Goodman's International PD library is available so that you can order from Mike Goodman with your credit card while on-line. Alan also provides adventure help maps and text files, and there are Falcon, Star Trek, MIDI and Music, programming and games areas. You can send messages to *ST Review* staff and download the non-commercial *ST Review* Cover Disk programs.

NICKELODEON BBS

INFO: *Dial-in: 051-709 8508 (Liverpool)*
Sysop: Mark Williams
Times: 6pm – 9am weekdays. All weekend
Speeds: Up to 14,400 bps with V42bis
FidoNet 2:250/107



Nickelodeon is a QuickBBS with interests in Atari, Amiga and PC computers. It used to go under the name of Mersey BBS but changed it to indicate the main function of the board which is Music and MIDI. It doesn't have a subscription rate unlike some other MIDI BBSs and apart from a very generous file ratio (you can download 10 files for every 1 you upload) there are no restrictions.

MIDI file areas range from pop to classical and most files have been vetted for quality. There are also special GM/GS file areas and a *Cubase* Users' Conference where experts are on hand for informative advice on all aspects of *Cubase*.

Time limit for the first call is a generous 30 minutes and five files to download.

THE CHAMELEON

INFO: *Dial-in: 0454 881095 (Chipping Sodbury)*
Sysop: Martin Stacey
Times: 24 hours
Speeds: Up to 14,400 bps with V42bis
NeST 90:106/153
FidoNet 2:444/102.0
TurboNet 100:1051/5.0
AtariNet 51:501/153.0
FishNet 777:200/0.0 700:200/1.0
TrekNet 107:1701/24
TechNet 111:440/5.0
ByteNet 88:440/102.0

The Chameleon has a dedicated area for the Falcon Owners' Group which has its own Public Domain and Shareware Library and magazine called *Falcon Update*. Here, you will find Falcon-related message bases from the networks and you can leave private mail for the *Falcon Update* editorial team. There is a special files section exclusive to members of the Falcon Owners Group and there will soon be an on-line ordering service with a PD library.

With a 580Mb hard disk, a download limit for first callers of 2000Kb a day, on-line games such as *Wrestling* and *Baseball* and messages from eight networks, make sure you have your bank manager's permission to log on to Chameleon!

KEITH'S POINT

INFO: *Dial-in: 0332 662988 (Spondon, near Derby)*
Sysop: Keith Jackson
Times: 8am – 11pm ringback system
Speeds: Up to 14400 bps with V42bis
NeST 90:103/102
FidoNet 2:255/400.1
AtariNet 51:502/4

A small BBS but a very friendly and easy to use one, where Keith has made a policy of catering for new users, using simple menus and non-cluttered screens. QWK off-line reader support is provided using AMail. Keith always has the latest version of IMHO off-line reader to download.

There are no download restrictions on the file list and Keith takes most of the NeST conferences. There are three on-line games: *Space Empire Elite*, *Thieves Guild* and *ST Nationals*. A good place to start – just call, let it ring between two and five times then call back immediately to log on.

ASK THE EXPERTS

It's question time again for ST Review's team of experts...

UPGRADE BARGAIN?

I have had my Atari 520 STFM for almost four years now and during that period I have found more and more software I have obtained requires one megabyte of RAM.

I have put off upgrading until now because a £50–£60 upgrade is a vast amount of money for a 12 year old boy to pay.

But there was a glimmer of hope – a 1Mb plug-in upgrade, available for £34.99 as advertised in issue 18 of your fab magazine.

My smile faded. It said the upgrade plugs straight in for over 90% of STFMs but some would have a problem. It would be just my luck for my ST to fall into the 10% or less category requiring extra bits and pieces and a bit of technical know-how. I am by no means a whizz at electronics and the thought of torturing my beloved ST with a soldering iron is not very pleasant, believe me!

Then I had a brain wave. If you knew the configurations of my ST then perhaps you could tell me whether or not I am included in the elite 90%. So I slapped issue 10's Cover Disk 2 in my drive and loaded up *STATS*, the handy utility you gave away. This gave me the following information:

TOS Version: 1.4
TOS Date: 04/06/89
GEM Version: 0.21
Total RAM: 524288 bytes

From this information could you please tell me whether I can plug in and go, or splash out on an experienced technician to fit it for me thus ruining the special offer price?

D Griffiths, Childwell, Liverpool

Without whipping the lid off your machine, it is impossible to say whether or not you are one of the "elite" ten per cent. While the vast majority of machines have socketed chips, yours may be one of the few that cause problems.

In less than ten per cent of STFMs, either the Video Shifter or MMU chips are surface mounted, or possibly both. If this is the case, then Go Direct will supply the correct adaptors free of charge. Soldering may be required in this situation and if you are lacking in confidence in the soldering iron department, beware. However, a fitting service is available or you can have a full refund; with an offer like this, you can't lose! **Vic Lennard**

EASILY DRAWN?

Having just received my official copy of the manual for *Easy Draw* on the *ST Review* June edition from Go Direct, I have some questions.

Within the manual is a section that covers importing various pictures that would subsequently be converted into bit image format by the supercharger program. There is also a section on the snapshot facility.

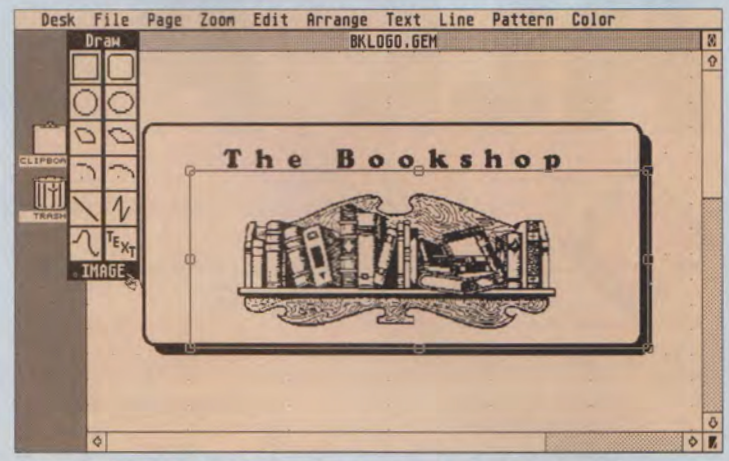
Can you tell me how to access these accessories as I can't seem to find them on the cover disk anywhere?

The desktop information does state *Supercharged Easy Draw* v2.35 but what does that mean to plebs like me or am I missing some programs?

D J Hann, Bishopston, Bristol

I'm not 100% sure what you mean here. GEM format graphics files can, of course, be loaded into Easy Draw just as if they had been created by the program in the first place but they aren't converted to bit image format.

Existing bitmap images can be imported but only in GEM IMG format. If you click the right mouse button in standard edit mode, a toolbox will be displayed from which you can select IMAGE. Clicking on this turns the pointer into a cross. If you then draw a box roughly where you want the bitmap image to be placed and click the right mouse button again, the GEM file selector will appear and you can then choose any IMG file you want to load.



Easy Draw – combined vector and bitmap graphics handling.

Once in place, that image can be moved around, resized and generally treated much like a vector object although it can't be rotated. This is one of Easy Draw's great strengths – you can mix bitmap images, fonts and vector graphics to get just the right effect.

The snapshot accessory was one of the extraneous items that was left off the cover disk to make room for more important files like the program and fonts. It is called SNAPSHOT.ACC and has been available from most PD libraries for more years than I care to remember! If you do want to take screenshots, a better bet would be Image Copy 2 from the ST Club. It's the one we use at ST Review and it works with just about everything whereas SNAPSHOT.ACC works from inside GEM programs like Easy Draw. **Andrew Wright**

CALAMUS CALAMITY

At the recent Alexandra Palace Atari show I saw a demonstration of *Calamus SL* running on a TT in full colour. I am wondering if it is possible to run this program in colour on an STE.

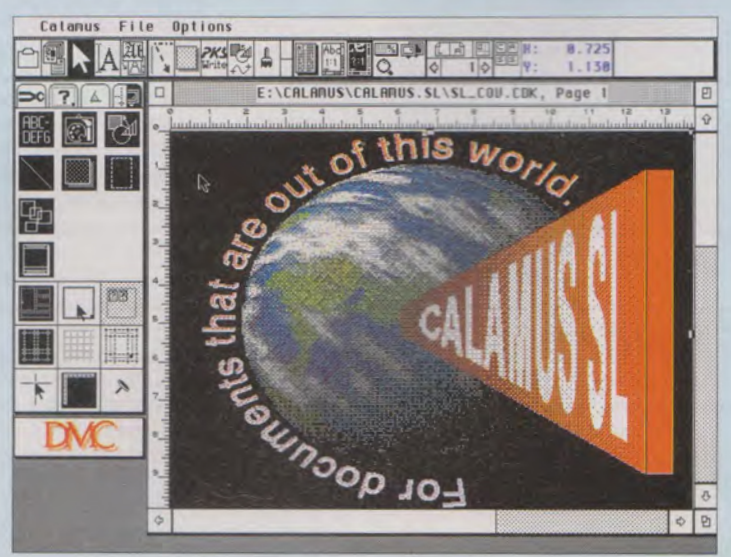
Would I need a graphics upgrade and a multisync monitor? At present I have a 4Mb STE (with TOS 2.06) and an Atari SC 1435 monitor and plan to purchase a hard drive shortly. Perhaps it would be cheaper to buy a second-hand TT?

M Thompson, Colindale, London

With a virtual screen driver such as MonSTEr it is possible to run Calamus SL in colour on an STE, but only just. In practical terms, you would be well advised to go for a machine with a bit more punch. At its new £799 price point, the Falcon makes an attractive DTP engine and will run SL in sixteen colours, as will a standard TT at a slightly increased speed.

If you want to use the package professionally, though, there is only one choice – a TT with Crazy Dots graphics card. The cost of this set-up is quite high, but it will let you run SL in a number of highly colourful resolutions at a rate of knots! Contact System Solutions on 081-693 3355 for more Crazy Dots details.

Nial Grimes



Big bird – Calamus SL runs happily in 16 colours on a Falcon.

GENLOCK ON THE ST?

I hope you can help. I have a 4Mb STE and my other hobby is using my camcorder. My hope is to be able to add titles to my videos and I appear to need various things;

a genlock and a program out on Amiga called *Scala*. Could you please advise me which genlock is best, where do I get it and at what price? I am not very technical so I would not be able to fit anything myself.
W McLean, Glasgow

First of all, you don't need an Amiga (who does?). While we're not aware of a genlock that is currently available, Titan Designs are about to launch an affordable one that will be compatible with the entire Atari range. There's no need to open the case on an STE or Falcon (though STFMs will need an internal adaptor) and it is very easy to fit. Why not contact them on 021-414 1630 for availability?

Secondly, you might not even need a genlock either! The term "video titling" covers a multitude of sins. If you want to superimpose graphics and text on top of your recorded videos then yes, you need a genlock. However, if you simply want to add things like intro screens and credits at the start of your video tapes, all you need is the right software. Best of the bunch at present is Video Supreme from Goodmans International.

***It costs £14.95 and lets you put together sequences of colour pictures, such as those you've painted yourself in an art program, and record them direct to video tape with no additional hardware except a standard VHS video recorder. Various wipes and dissolves can be used to turn one image into another and an add-on program called Screenmaker, costing £9.95, will let you add text in dozens of fancy fonts. Have fun!* Andrew Wright**

MERGE AND TAKEOVER

I have used *1st Word Plus* for creating letters. I now want to use the Mail Merger together with a database.

The article in the November issue used *Superbase Personal*. However I have not been able to trace a supplier. I note the December issue will contain a database on the Cover Disk. Can this be used with *First Mail* for creating letter headings and address labels? If so will it have the same default values for field and record separators as *First Mail*?

H&D Base is the preferred database for *First Mail* but again I have not been able to trace a supplier.
D Walker, Romsey, Hants

EasyBase can be used together with First Mail or any application capable of handling ASCII data. First Mail needs ASCII comma delimited files, which EasyBase can generate by creating a suitable Report form. Save the output file to disk using the "Standard report to file" option and load the resulting data file into First Mail in the usual way.

***For simple form letters it's probably quicker to use EasyBase installed as a desk accessory to import your data straight into 1st Word Plus using the EasyBase "Standard report to keyboard" option.* Joe Connor**

FACTS ABOUT FAX

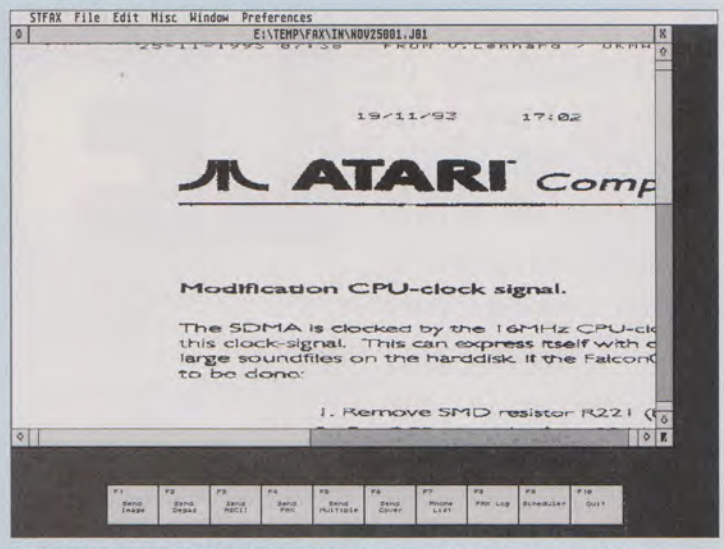
I recently bought a copy of *STraight Fax* in the hope of using it with my fax modem but without luck. Any attempt to send or receive a fax produced a message along the lines of "Unable to initialise Modem".

A possible explanation is that *STraight Fax* deals with faxes in CCITT Group 3 Class 2 format, whereas my modem can only handle Group 3 Class 1 format.

These formats are apparently not compatible. Checking around it would seem that many other commonly available modems also support Class 1 only and would experience a similar problem.

Does this explanation sound plausible? If so, other readers contemplating buying *STraight Fax* should check carefully whether their modems are suitable.

Can you suggest any alternative fax software for an ST which will operate with a class 1 fax modem?
J D Hamilton, Balfron, Glasgow



STraight Fax – the latest version is now Class 1 compatible.

***I gather from your letter that you are using v1.xx of STraight Fax which is indeed incompatible with Class 1 FaxModems. The latest version 2.0 of STraight Fax works both with Class 1 and Class 2 models and is also compatible with MultiTOS and Geneva. Distribution of STraight Fax in the UK is currently under negotiation, so watch the news pages for information about its availability.* Ofir Gal**

TIMELY TIMEWORKS

Please can you help me with a couple of problems.

1. I have an original copy of *C Font* bought from Compo. I note that in their recent advertising, they say that it supports GDOS fonts, and yet, on Version 1.1 (Jan 1992) the GDOS facility is greyed out. Is there an upgrade?
2. In connection with this, thanks for *Timeworks* which must have been the best Cover Disk of 1993! But can I use my large collection of Calamus Fonts in *Timeworks*? Would it be possible to have a tutorial to show how it could be done?
3. In *Timeworks*, I use the NEC 360x360 emulation to print out documents on my Citizen 24e printer. Even with a print speed accessory, the printout is abysmally slow, especially when there are a couple of graphics on the file. Is there any way of speeding things up?
4. Finally, when using the headline facility in *Timeworks*, I often find that the last few lines of what I want to put on the page simply disappears, due to the other lines taking over the whole frame.

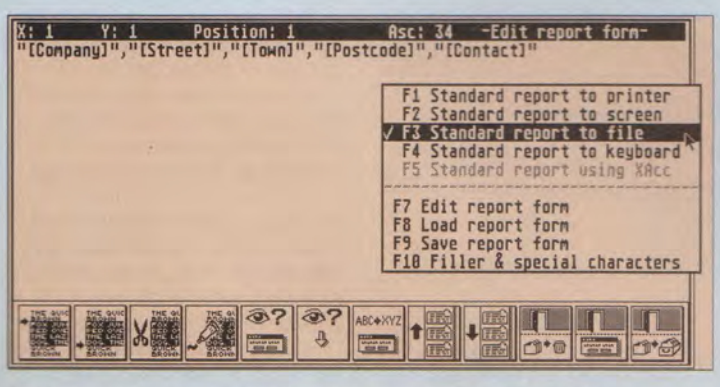
This becomes a real pain when I'm often only using about 8 lines on an A4 page! Again, is there a way around this? Thanks for a super magazine. There's nothing to touch you and I look forward to many more excellent Cover Disks and informative reading for a long time to come.
M Simpson, Brixham, Devon

Calamus fonts are fully scalable and cannot therefore be converted directly into GDOS format. However you can use C-Font to produce certain point sizes for use with packages such as Timeworks.

All versions have been able to deal with GDOS fonts, but some early releases can struggle when it comes to Timeworks. Perhaps the best idea would be to go for an upgrade to release 2, which will cost £3.99 directly from Compo – just return your master disk with a covering letter. If you do want to persevere with 1.1, bear in mind that the program reads your ASSIGN.SYS file to assess printer resolution; in other words, it's best run from your GDOS disk.

Some of Timeworks' speed problems can be attributed to floppy access. A hard disk will reduce the amount of time taken to load fonts into memory and prepare graphics for output, thus improving the overall speed. I have used Timeworks from a hard disk with the FPPRINT patch (AUTO folder version) in the past and it yielded reasonable results. Remember, an A4 graphics page at 360dpi contains well over a megabyte of data – it's going to take time whatever your hardware set-up.

As for your problems with the headline style, you could try using a slightly smaller font or leading (space between the lines). To adjust any of the dimensions, click on "headline" within the browser, choose "Paragraph style" from the "Text" menu and adjust away. Alternatively, you could just define a totally new paragraph style from the same dialogue.
Nial Grimes



Perfect match – Easy Base can produce data for First Mail...

Do our articles stimulate you or simply make you irate? Either way, drop me a line and contemplate what you can buy with the £25 cheque for the Star Letter...

LETTERS

HOME RUN

On the day my copy arrived I tried many times to open the disk to view the various programs, mainly *Easybase*, but without success. Also I followed your instructions printed in the "Getting Started" block. But no matter how many times I attempted, both using a high resolution (SM124) monitor and a portable colour TV set, I could not get the *STRBAKUP* program (or any other program) to run. After reading the *MONOPACK* program, I tried to load with the <shift> key pressed, but again with no luck.

The *STRBAKUP* program from the *EASYMONEY* Cover Disk (STR19) was loaded and using the *EASYBASE* disk as the source, a copy was made. After deleting the files not required, *EASYBASE* worked satisfactorily.

As a trial another copy was made and by deleting other folders and files in a gradual sequence the disk was down to 313698 Bytes used before I could load the *STRBAKUP* program. My computer is a 1040STFM.

Could you say from the above that the problem is in my machine by it not having enough memory?
Robert Edwards, Shrewsbury

No Robert, there is absolutely nothing wrong with your machine. As mentioned in last month's news page, the problem with the EasyBase cover disk concerned a rogue DESKTOP.INF file which worked fine on any computer with a TOS version of 2.06 or above.

I can only apologise for any inconvenience that this has caused readers. I have personally put together every cover disk since issue three and that includes sourcing most of the commercial software and all of the PD and shareware offerings. However on this occasion I left it to someone else, who will remain nameless, to simply write the DESKTOP.INF file to the master cover disk...

For those of you who missed the instructions in last month's news page, let me repeat them here:

- ***Boot up your ST with one of your normal boot disks.***
- ***When the desktop appears, remove the disk and place the ST Review cover disk in the drive.***
- ***Use the "Save Desktop" selection in the "Options" menu to save a new DESKTOP.INF file to the disk.***
- ***Reboot with the ST Review cover disk.***

Rest assured – this is one mistake that will not be made again.



Hopping mad – Frogger can work on a Falcon with TOS 4.01!

FALCON FROGGER

My attention was drawn to Morton Smith's letter in issue 18 of your magazine. You have probably by now been inundated with phone calls and letters telling you that you can run Dave Munsie's *Frogger* on Falcons with TOS 4.01. Just in case you haven't, to run *Frogger* all you have to do is change the video parameters.

From the desktop go to the OPTIONS menu and select SET VIDEO DISPLAY, and change the following parameters as follows: COLORS – 256; COLUMNS – 80; DOUBLE LINE – ON; COMPATIBILITY – ignore. Click on "OK" and run *Frogger* once the screen changes.
A Chin, Whitehead, N. Ireland

Thanks Alan. Yes, we have had several letters on this subject and can confirm that the above works on our machines as well.

UP FOR GRABS

I noticed one of your letters in the November issue was from Chris Walton of York, and he was after one of your Cover Disks, with *1st Word Plus* and instructions, but was out of luck because you had sold out of that particular issue.

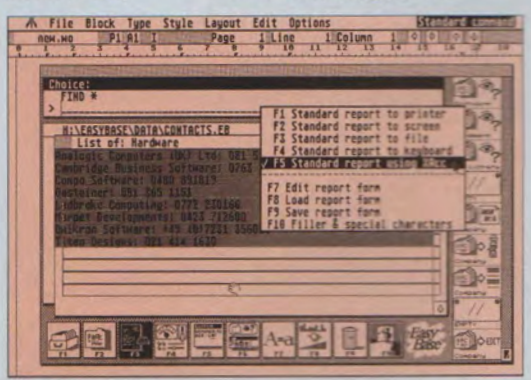
I thought I would drop you a line, as you asked if anyone could help, to let you know I have the version of *1st Word Plus* (not the most up to date) that appeared on your Cover Disk (yes I bought the magazine thinking I was getting a newer version...), but mine is the full version with the manual in a fancy white A5 box folder and two disks.

If you would like to pass this information on, Chris can have my copy of *1st Word Plus* for £15.

I will not be needing mine now that I have defected to a PC, sorry ST fans – business you know!
I Chisholm, Carlton, Cleveland

Thanks very much Ian. Hopefully Chris will be a regular reader and will see this. If so, please give the ST Review office a call and we'll put the two of you in touch.

Defected to a PC? May the wrath of Sam Tramiel be upon you...



EasyBase – great program, but it helps if you can load it...

GOT SOMETHING TO SAY?

ST Review is your magazine and putting pen to paper gives you direct contact with us. As editor, I read every letter that you send and carefully select the ones for publication. If you want to complain, fine – but mindless insults will not find their way into Letters...

It may simply be that you have a constructive criticism about an article in *ST Review*, or that one of our columnists has inflamed you with his honesty. Whatever the reason, drop a line to me, Vic Lennard, at:

Points Of View,
Atari ST Review,
Europa House,
Adlington Park,
Macclesfield SK10 4NP.

Please do not send stamped-addressed envelopes; personal replies will not be entered into.

All mail received is considered for publication unless otherwise stated and we reserve the right to edit letters where necessary without altering the context.

IN PRAISE OF WOMEN

Here I am responding to your call for the ladies of the computing world to stand up and be counted.

On reading your column, I have to admit, I too have wondered why computing seems to be so "male oriented". Devoting a page to women's perspective could just be the next step that would push *ST Review* ahead of the competition.

Regarding some of your comments, of which I take no real offence I might add, keeping recipes on disk has never entered my head. As for knitting – don't really do it. I tried it once, for the Save The Children appeal in Bosnia and believe me you would have to be a desperate orphan to love the teddy I made!

So... I'm thirty one and have owned my humble Atari STFM (with TOS 1.00, 0.5Mb initially, and I think it was used to plan Hadrian's Wall!) for almost two years. I had an Amstrad 6128 with green screen VDU for about five years. I ignored all the "It's dead and buried you know" remarks and thought it was the bees knees – until a wonderful friend gave me his old Atari STFM with a mono monitor (SM124) and a double sided disk drive! Wow! This was computing – my poor Amstrad now sits in the linen cupboard...

I upgraded to 1Mb (one of the best moves I ever made) and enjoy the full use of *Protext* and dictionary. I use *Timeworks* as well as *1st Word Plus* and *Word Writer*. The latter I consider to be an extremely underrated word processor by the way – it challenges *Protext*.

When I was first given the STFM I was terrified – I thought a mouse lived in a hole under the bed! I literally started from scratch and can honestly say that everything I know, discovered and stumbled on was gleaned from your magazine. Most of the best programs I have came free on cover disks! It's a new world!



Journo's choice – Protext, used for writing freelance articles and books alike.

So what do I do that's so important? I'm a writer and run a magazine for anyone who likes Barbra Streisand. I write important business letters, keep accounts and use *Timeworks* for info sheets. I upgraded from an Amstrad DMP 2000 printer to a Citizen Swift 200 (the second best thing I ever did!)

On my humble STFM I have written mind blowing articles on Terminator and Aliens, various freelance articles plus hundred thousand word novels (which have yet to be published). And 120 page screenplays for cinema... One of these days I intend to start teaching myself programming.

I play games, mainly RPGs. They're the best and I will soon be investing in *Ishar* and *Monkey Island* although I am quite partial to *Magic Boy* presently (the game, that is...)

And it doesn't all stop there. One day I will probably upgrade to a brand new STE with a better, faster, bug free TOS when the pennies accumulate and Christmas is over.

Lynne Pounder, Peterlee, Co. Durham

Thanks for the partial life story, Lynne! Yours was one of many letters I received on this subject.

Female computer journalists are certainly at a premium where the ST is concerned. You may have noticed that we've used a second female writer this month, a specialist in primary school education, but there are too few educational programs out there for this writer to be used regularly – her last piece was back in issue 12!

ST Review is always open to ideas for articles. If you're a woman using an ST and would like to write for ST Review, drop me a line enclosing a short piece of computer-related writing.

£25 STAR LETTER



Wooden widget – life made easy for the princely sum of five pounds!

HOME GROWN

In your October '93 issue in the Short Cuts budget buys you reviewed the Atari workstation from First Computer Centre. You gave it a 2 star rating at the price of £36.99. What a waste of money. Please find enclosed 2 photos of the NIK workstation made from scrap wood which you could make for £5.00. As you can see, there is ample storage for 150 disks on shelf or for a second drive. And there is ample room to turn the computer on and off and for the cables and plenty of ventilation.

As you can see I run a 1040 STE, a Commodore 1084s colour monitor and a Commodore MPS 1270A ink jet printer. There comes my problem. It's a good quality printer for its price but is there anybody who knows of a reliable Diconix Printhead Cartridge? So far I have not found anyone, and with only one supplier in the area – 27 miles away – it is quite a high price to pay at £17 each.

I find your magazine to be one of the best on the market as I am disabled with a bad back and use the computer to pass the time away. My compliments to ST Review for the best news and views.

Nik Burgess, Launceston

Thanks for the letter, Nik and the photographs, one of which we've reproduced here. Do remember what 2 stars in our Short Cuts section means – "Not really, unless it happens to be your cup of tea."

By a pure fluke, Nick was also the winner of our Star colour printer competition some issues back, a fact I hadn't realised until he telephoned and told me so!

If anyone does know of any company selling Diconix printhead cartridges for less than £17, please drop me a line.

MIDI MADNESS

It was with some dismay that I read the letter from Dave Clackett of "Hands-On" and the comments made by Vic Lennard in reply. (ST Review issue 18).

I must admit that I missed the first issue referred to in Mr. Clackett's letter in which Mr. Lennard reviewed demo MIDI song files from various companies, and am therefore unable to comment directly on his review, but, as a performing musician and a MIDI programmer I feel that I really must add my comments to those of Mr. Clackett.

Let me point out that my band uses "Hands-On" songfiles almost exclusively for live performance and, having tried MIDI files from several other sources we find them to be the best in the field by far!

Whilst it is clear that Mr. Lennard based his comments on the demo versions of the files supplied by "Hands On", which I personally have not listened to, I find it highly unlikely that such an accomplished and professional company, as Hands-On undoubtedly are, could be accused of resorting to "trickery" in order to brighten up their demos with too high a reverb level!

Secondly, I find it incredible that someone of the standing of Mr. Lennard, with his major connection with the U.K.M.A., should make such negative remarks about the use of system exclusive and registered parameters in commercial songfiles. Speaking from my own point of view, not only does the inclusion of such data help to produce sounds that I considered to be impossible to obtain from my modules, but, by examining my sequencer's event list, I have begun to see just what can be achieved from understanding the use of such parameters, which are after all, an important part of the MIDI protocol. Surely Mr. Lennard should applaud the use of this data in his aim to make MIDI more accessible to the masses! Finally, I feel that Mr. Lennard comments about error correction (quantising) is a two- edged sword, in as much as he criticises the use of error correction on the grounds that it is used to produce "accurate renditions" this, he claims, is detrimental to that indefinable quality referred to as "feel".

Phil Grice, Stoke-on-Trent

The reverb levels on the Hands On demo were definitely set higher than on their standard song files. I wouldn't call this trickery; it's simply a legitimate way to make the demos sound a little more lively. But to my ears, such reverb levels simply "muddied" the overall sound, hence my comments.

I certainly do not bemoan the inclusion of System Exclusive data and Registered Parameters. What you must remember is that I attempted to review the demo packages from the angle of a non-expert and so judged the demos on their audible results. My comments were made accordingly.

There is a difference between an attempted transcription and a personal arrangement. Of the former, Hands On has no equal which is probably why you choose its files for live work. But I do not believe that quantising almost every aspect of a song necessarily makes it an accurate rendition – other companies try this and audibly fail! After all, when was the last time you heard a drummer keeping dead accurate time throughout a song?

FAST ST REPAIRS

Upgrades + Engineering requirements

★ GUARANTEED SAME DAY SERVICE
£34.99 + parts
computers received by 11.00 a.m.

★ NORMAL SERVICE
£24.99 + parts
(Typically 24 hrs)

Door to door pick up + delivery anywhere in the U.K.
Also Mono + Colour Monitors

Central London

Low Cost upgrading

STE to 1Mb	£13.99
STE to 2Mb	£49.99
STFM to 1Mb	£44.99
STFM to 2.5Mb	£79.99
TOS 1.4	£25.00
TOS 2.06	£POA
Double Sided Drive	£47.00
Power Supply	£39.95
Power Supply (Replace)	£25.00

Fitting for the above from £15.00

FAST ENGINEERING
144, Tanner St., Tower Bridge, London SE1 2HG
Tel. 071-252 3553

ATARI ST REVIEW Advertisers' Index

1st Computer Centre 22, 23
AF Weaver Engineering.....104
Analogic Computers .....IBC
AWF PDL.....56
C.G.S. 13
Care Electronics 107
Datagem 92
Eagle Software 95
ESP Software 41
Fast Engineering.....114
Floppyshop 56
Games HQ.....107
Gasteiner 98, 99
HiSoft .....27, OBC
Ladbroke Computers 48, 49
L.A.P.D. 30, 31
Lifetools 36
Merlin PD 104
MT Software 68, 69
New Age PDL 82, 83
Premier Mail Order.....39
Silica Systems 21
Silicon Systems 56
Snap Computer Supplies.....104
Special Reserve.....IFC, 3
ST Club.....17
System Solutions 9
Take Control 56
Tumblevane PDL.....76
Warpzone PDL 39, 78, 79
Wizard Games 40
Wizard PD.....44



ISSUE 11 – March 1993
• DTP • High Density Internal Drive Step-by-Step • 16MHz Processor for any ST
ON THE DISK – Breakthru



ISSUE 12 – April 1993
• Arcade classics on the ST • 16MHz Processor Upgrade Step-by-Step • MultiTOS Preview
ON THE DISK – Video Titler



ISSUE 13 – May 1993
• Digital sound on the Falcon • Buying a printer • DA's Vector • VGA monitors • Overscan
ON THE DISK – Write On worth £65



ISSUE 15 – July 1993
• Auto Tracers • Imagecopy 2 • CD-ROM • Networking • 2 Falcon Games • Session Partner
ON THE DISK – Easy Tools worth £40



ISSUE 16 – August 1993
• DTP in Colour • PhotoCD • Colour Printing • OCR Senior • NVDI • DeskJet 1200
ON THE DISK – Concerto worth over £40



ISSUE 18 – October 1993
• Born Yesterday – Eight years of the ST • Outline Art • Modems • Patrician
ON THE DISK – Easy Money worth £25



ISSUE 19 – November 1993
• Optical, Floptical and Syquest Drives • Digitape • DGraph • Monitoring the Falcon
ON THE DISK – Flair Paint worth £35



ISSUE 20 – December 1993
• Image Processing special • The fastest game reviews • Geneva Preview • Atari Works
ON THE DISK – Easy Base worth £100



ISSUE 21 – Christmas 1993
• Protext • Chagall • T Board ST Accelerator • MiniS Hard Drives • Outside • Photo Show
ON THE DISK – Timeworks 2/Utilities

ATARI ST REVIEW BACK ISSUES

If you've missed any issues, now's your chance to obtain them. But hurry – stocks are limited...



ST Review T-Shirt
Only £3.95

£4.50 incl P&P each

BACK ISSUES ORDER FORM

Please send me:

☐	Issue 11, March 1993	£4.50
☐	Issue 12, April 1993	£4.50
☐	Issue 13, May 1993	£4.50
☐	Issue 16, August 1993	£4.50
☐	Issue 18, October 1993	£4.50
☐	Issue 19, November 1993	£4.50
☐	Issue 20, December 1993	£4.50
☐	Issue 21, Christmas 1993	£4.50
	ST Review T-Shirt	£3.95

Issue No's 1-10, 14, 15 and 17 are no longer available

Name .....
Address .....
.....
.....
Tel No. .....

Send cheques payable to:
Europress Enterprise at Europa House, Adlington Park, Macclesfield SK10 4NP
VISA or phone Vicky 0625 878888 (9am-1pm only) quoting your credit card no.

Analogic Computers (U.K.) Ltd

Unit 6, Ashway Centre,
Elm Crescent,
Kingston-Upon-Thames, Surrey KT2 6HH

Mon-Fri. 9am to 6.30pm Sat 9am to 5pm
TEL: 081-546-9575
FAX/TEL: 081-541-4671

ANALOGIC
ANALOGIC
ANALOGIC

OFFICIAL ATARI REPAIR CENTRE

• COMPUTERS • MONITORS • REPAIRS WITHOUT DIAGNOSTIC FEES

520/1040 ST/STM/STF/STFM/STE £59.95
Monochrome, Colour Monitors excluding CRT, L.O.P.T. £59.95

including delivery back by courier service

★ We pick up computers for repairs and memory upgrades for Next Day delivery to us by Courier Service for only £5.00 + VAT

MEMORY UPGRADES

MARPET DEVELOPMENTS OFFICIAL XTRA-RAM DELUXE INSTALLERS

*FREE FITTING

520 STF/STFM to 1 Meg ..... * £59.95	520 STE to 1 Meg ..... * £17.95
520 ST/STM/STF/STFM to 2.5 Meg £89.95	520 STE to 2 Meg ..... * £59.95
520 ST/STM/STF/STFM to 4 Meg £139.95	520 STE to 4 Meg ..... * £114.95

NEW

PROTAR PROFILE SERIES II HARD DRIVES

QUANTUM/MAXTOR MECHANISM WITH CACHE

Compatible with all ST/STF/STFM/STE/Mega ST/Mega STE/Falcon

Profile 50DC £249.95	Profile 170DC £369.95
Profile 120DC £319.95	Profile 240DC £479.95

● POA for Higher Range of Profile Series II and SCSI Bare Drive

SCSI BARE QUANTUM HARD DRIVES

WITH CACHE

50Mb £129.95	170Mb £269.95
120 (Maxtor) Mb £199.95	240Mb £349.95

STFM, STE, FALCON 030 COMPUTERS

1040 STE Family Curriculum Pack II
1040 STE Music Pack
Falcon 030 with or without Hard Drive

NEW VERY LOW PRICES

P.O.A.

STE TOS-SWITCHER

with Hardware Switch

Solderless DIY Kit

STE TOS SWITCHER...£29.95 STE TOS ROMS...£39.95
STE TOS SWITCHER + 2.06 ROMS...£59.95

NEW

STFM TOS-SWITCHER

with Hardware Switch

Solderless DIY Kit

£69.95

including 2.06 ROMS

MONITORS

AMITAR £129.95 including VAT excluding delivery
High Resolution Monochrome Monitor

Philips CM8833 Mk II ..... POA

ACCESSORIES and EMULATORS

STE/STFM Scart Lead £14.95	10 Blank Sony Discs £9.95
STE/STFM Lead to Philips CM8833 II £14.95	10 Blank Unbranded Disks £5.95
Philips CM8833 Dust Cover £6.95	Forget Me Clock £21.95
Twin Joystick/Mouse Port ext Lead ..£5.95	PC Speed £59.95
Squik Mouse £14.95	AT Speed 8 ..... £134.95
Dust Cover £4.95	AT Speed C16 ..... £199.95
Mouse Mat £4.95	

POWER SUPPLIES

STFM/STE Power Supplies (Service Exchange) £29.95
NEW STFM/STE Power supplies with ONE YEAR WARRANTY £49.95

DISK DRIVES

1 Meg 3.5" Internal Drive	£44.95
High Density 3.5" Internal Drive	£54.95
High Density 3.5" Internal Drive + Module	£79.95

PRINTERS – HP510 £299.95 – HP550 Colour £549.95

- All prices include VAT and **NEXT DAY DELIVERY** subject to availability
- Fixed charge for repair does not include Disk Drive Replacement & Keyboard
- All prices subject to change without notice
- We reserve the right to refuse any ST Repair
- Please allow 5 working days for cheque clearance

Access VISA

GUARANTEED SAME DAY DISPATCH (subject to availability)

SPECIAL OFFER FOR A LIMITED PERIOD

PROTAR PROFILE SERIES II 50DC HARD DRIVE £249.95
compatible with complete ST Range and FALCON

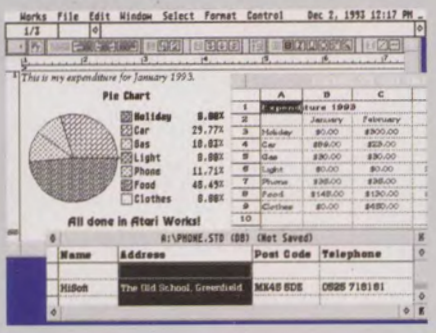
Professional Service with no surcharge

WHILE-U-WAIT!!!

◆ MEMORY UPGRADES ◆ TOS UPGRADES ◆ DISK DRIVE UPGRADES ◆ EMULATORS ◆ ACCELERATORS ◆ many REPAIRS

New Software for a New Year

Business Applications



Atari Works

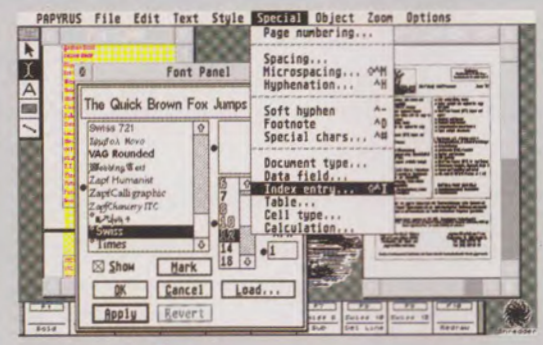
The comprehensive, up-to-date, integrated business package for any Atari 680x0 computer with 2Mb of memory and a hard disk. Atari Works contains a word processor, a spreadsheet and a database in one program, so that swapping between the applications is a piece of cake!

The word processor contains all the normal editing functions plus the drawing of lines & boxes, graphic import, spell checker and thesaurus, mail merge etc.

The spreadsheet is as powerful as many people will ever need - organise your data clearly and simply as text, percentage, fixed or floating-point or currency and then, using the 53 built-in functions, create interdependancies between your information. Then display the results graphically with pie charts, line graphs etc. and cut/paste these into the word processor!

The database is a joy to use; create as many fields as you need and position them on your form using the mouse. Once the data has been entered you can sort it, match records, find specific entries and produce reports, all quickly and simply. It is easy to import data from other databases and export data for use with the mail merge facility of the word processor.

All modules support the new SpeedoGDOS and are fully integrated - Atari Works is probably the most powerful integrated package yet seen on the Atari computers.

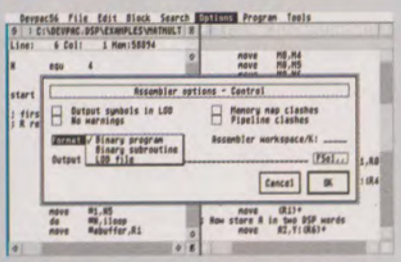


Papyrus

If you need a high-end word processor with many desktop publishing features then Papyrus is the new package for you.

The application is ideal for producing all types of professional-looking output, from one-page flyers to complete manuals. With extensive SpeedoGDOS support, paragraph styles, headers, footers, footnotes, reliable undo, automatic table of contents, flexible zoom, index creation, full margin control, freely adjustable paper format, letter micro-spacing, GEM vector import, text flow around objects, master pages, RTF support and more, Papyrus is the premier choice for all serious writers and designers.

Programming



DevpacDSP

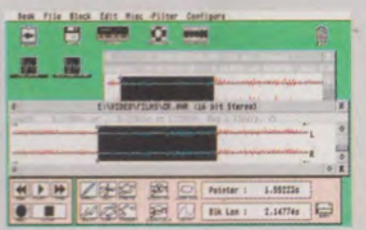
Another new programming package joins the HiSoft family of languages for the Atari 680x0 computers. DevpacDSP is a complete development system for the Motorola 56001 digital signal processor used in the Falcon030.

Remember that we've also updated our other programming languages for the Falcon. Devpac 3.10, Lattice C 5.60 and HiSoft BASIC 2.10 all contain extra libraries/include files for the Falcon, an extended debugger that works in all Falcon resolutions and much more. The *Modern Atari System Software* book (free with Lattice C 5.60) gives full Falcon developer documentation.

DevpacDSP consists of a fast 56001 assembler, fully integrated with our friendly GEM editor, which supports macros, conditional assembly, include files and direct production of .LOD files or Falcon binary plus an easy-to-use GEM-based debugger for disassembling and stepping through your code, modifying registers, setting breakpoints etc.

Video/Music





VIDEOMASTER

The best-value real-time video digitiser you can buy. VideoMaster is available for the ST/STe and, in a special enhanced true colour version, for the Falcon. VideoMaster RGB includes our new colour splitter, ColourMaster and produces amazing quality colour stills.

clarity

Clarity is our latest sound sampling system for the Falcon. Featuring an extensive sample editor, a complete drum sequencer and a powerful MIDI controller, Clarity is an ideal companion for all musicians. Includes extra hardware for CD (44.1KHz) and DAT (48KHz).

Utilities



HARLEKIN 3

This popular collection of utilities for all Atari computers gets another facelift. Harlekin 3 contains a multitude of enhancements including a multi-file editor, a new communications module with a scripting language, support for high density disks, a new Alarms module, for use with the Manager, separate keyboard and font editors and much more. The whole package has a new look, with all modules in a window or a flying dialog so that they can be moved and the memory configuration is now even simpler. Upgrades from Harlekin 2 cost only £19.95.

All products on this page are either available now or by the end of January '94 - please call to confirm availability.

HiSoft
High Quality Software

The Old School Greenfield
Bedford MK45 5DE UK.
Tel +44 (0) 525 718181
Fax +44 (0) 525 713716

If you have difficulty obtaining our new titles, just call, quoting your Access/Mastercard/Visa/Switch/Connect card number and expiry date and we will despatch the goods within 5 working days. For an extra £5 we will despatch the day of order by ParcelForce 24 hour service. Ask for our new 32-page catalogue.

VISA Access

© Copyright HiSoft 1993, E&OE.